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University News

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R.P. SINGH

Re-engineering Education for Tomorrow

RAJENDRA SINGH, M.S. SODHA, R.D. PATHAK & D. KAUL

Material Production and Distribution of Study Material in an Open University
—A Model

MEENA HARIHARAN & I. RAMABRAHMAM

Measuring Professional Competence

AMARDEEP & B.B. SINGH

Awareness About Educational Technology
—A Study of Forestry Institutions of U.P.

KARAN SINGH

Dimensions of Human Personality
—Convocation Address

SEMINAR ON HUMAN RIGHTS

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MANAGING HIGHER EDUCATION

SAARC VARSITIES ASSOCIATION

Association of Indian Universities

BABA FARID UNIVERSITY OF HEALTH SCIENCES

Kotkapura Road, Faridkot-151 203

Advt. No. 01/99

Applications are invited for the following posts on a prescribed form :

Sr. No.	Name of Post	No. of posts	Pay scale (Rs.)
1.	Registrar	01	14300-20100+Rs. 300/- Secretarial allowance
2.	Controller of Examinations	01	14300-20100+Rs. 300/- Secretarial allowance
3.	Assoc. Professor (Distance Learning (Medical) Education & Educational Technology)	01	3700-5700 (Un-revised)
4.	Assoc. Professor (Computer Applications)	01	3700-5700 (Un-revised)
5.	System Manager	01	3700-5700 (Un-revised)
6.	Finance Officer	01	13500-16800+Rs. 300/- Secretarial allowance
7.	Deputy Registrar	02	12000-15500+Rs. 300/- Secretarial allowance
8.	Deputy Librarian	01	3700-5700 (Un-revised)
9.	Security Officer	01	7220-11660
10.	Executive Assistants	12	7220-11660

Qualifications & Experience :

Sr. No. 1 :

i) Professor in the field of Health Science with a minimum experience of five years. OR
ii) Working Registrar of a Health Sciences/Medical/Technical University in India. OR
iii) Punjab Govt. Officer not lower in rank than that of an Additional Secretary to Govt.

He shall hold the office for four years or till the age of 60 years and shall be eligible for re-appointment.

Sr. No. 2 :

a) Master's Degree with atleast 55% marks.
b) Atleast 15 years experience as Professor/Reader/Lecturer/Principal taken together, of which atleast 8 years should be as Professor/Reader/Lecturer in Reader's scale/Principal, with experience in educational administration. OR
Comparable experience in research establishment and other institutions of higher education.

In case of Administrative Officers and University/College teachers, approved by the University, the minimum educational qualifications shall be as under :

a) Master's Degree in any discipline
b) 15 years of service in the Officer's cadre out of which atleast 7 years service as Deputy Registrar or its equivalent rank.

Sr. No. 3 :

Retired/working teacher in a recognised Medical College/institution as Reader/Assoc. Professor OR Lecturer with 5 years experience and experience in teaching programmes but not exceeding the age of 60 years.

Sr. No. 4 :

MD/MS in any discipline with 5 years experience as Lecturer alongwith preferable 6 months experience in working on computers.

Sr. No. 5 :

MCA/M.Sc. with Post Graduate Diploma in Computer Applications/B.E. in Computer Science with 8 years experience in working on computers.

Sr. No. 6 :

i) Graduate in 1st Division in Commerce/Economics OR Master's degree in Commerce/Economics with at least 55% marks from recognised University with the following :
a) Must have passed SAS Examination held by the Comptroller and Auditor General of India/State Finance Department with atleast 5 years experience of accounts in a responsible position in a University/Educational Institution. OR
b) Must have 12 years experience in a supervisory capacity in financial management/administration, in a University.

Sr. No. 7 :

i) Master's degree with at least 55% marks from a recognised University.
ii) Atleast 10 years experience of working in a responsible position in a University.

Sr. No. 8 :

i) Master's Degree in Library Science/Information Science or an equivalent professional degree with atleast fifty five per cent marks.
ii) One year experience of work in an area of information technology.
iii) Eight years experience as an Assistant University Librarian/College Librarian and
iv) Preferably evidence of innovative library service, published work and professional commitment.
v) The candidates should have demonstrable track record of experience.

Desirable :

M.Phil/Ph.D. degree in Library Science/information Science/Documentation/Archives and Manuscript keeping.

Sr. No. 9 :

i) Retired Armed Forces Commissioned Officer, not below the rank of Major.

Sr. No. 10 :

i) Graduate in 1st Division in Arts/Science/Commerce OR M.A./M.Sc./M.Com. in 2nd Division.
ii) Passed one year course in Computer Applications.
iii) (i) & (ii) above OR BCA (Bachelor of Computer Applications)

GENERAL :

i) All the candidates for the posts from Sr. No. 1 to Sr. No. 8, should have preferably passed Punjabi upto Matric standard.
ii) Retired medical teachers from Private/Government Departments may also apply for a teaching post. They may be appointed on a contract basis and may be retired at the age of 65 years.
iii) Maximum age on the last date for applications for the teaching posts shall be 50 years and for Non-teaching posts shall be 35 years (first entry in the University). There shall be no age limit for candidates coming on deputation. Minimum age shall be relaxable by 5 years in the case of SC/ST candidates.
iv) Higher emoluments may be given to the deserving candidates.
v) Prescribed application form can be obtained from "Registrar, Baba Farid University of Health Sciences, Kotkapura Road, Faridkot-151 203" by sending a crossed Demand Draft in favour of "Registrar, Baba Farid University of Health Sciences" payable at Faridkot — a) Rs. 100/- for General category. b) Rs. 50/- for SC/ST candidates, alongwith a self addressed stamped (Rs. 3/-), envelope (8"x10").
vi) **Last Date : Completed forms must reach "Registrar, Baba Farid University of Health Sciences, Kotkapura Road, Faridkot-151 203" by 23rd April, 1999.**
vii) Incomplete applications will not be considered.
ix) The candidates having medical qualification shall be given NPA @ 25% of the basic pay, as per the Punjab Govt. rules.

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IN THIS ISSUE

Re-engineering Education for Tomorrow 1
Material Production and Distribution of Study Material in an Open University 5
Measuring Professional Competence 14
Awareness About Educational Technology 16
Convocation
Shivaji University, Kolhapur 20
Campus News
SAARC Varsities Association 23
Workshop on Nuclear Magnetic Resonance 24
Seminar on Human Rights 25
Refresher Course on Gandhian Thoughts 26
Agriculture
Haryana Agril Officers Workshop 26
News from UGC
Countrywide Classroom Programme 28
News from Abroad
Maxican Govt. Scholarships 28
Book Review 29
Theses of the Month 31
Classified Advertisements 35

Re-engineering Education for Tomorrow

R.P. Singh*

Education which is both a process and product is in its essence only a means to achieve ideals determined by a variety of leaders in society. I am always amused to find education being considered capable of thinking for itself. It has, to my mind, never been more than an instrument which obeys its masters. When the masters are predominantly religious in nature, the content of education takes on a different hue and colour than the time when these leaders are either secular or essentially political. There are no boundaries between politics and education even as there are none between politics and religion. Therefore, splitting hairs to define education independent of social reality is absurd simply because the assumptions underlying the concepts of independence, boundary lines etc are so confusingly blurred that it takes a Socrates, a Newman, a Dewey, a Radhakrishnan, or for that matter Sir Syed to define it and present a social reality in unambiguous terms.

In order to make my stand very clear I shall take recourse to two examples. These examples may be taken against the background that all political thinkers, social scientists, religious leaders and others of similar ilk take recourse to education for the propagation and acceptance of their ideas. While it is possible that those who work in the field of education may not feel happy about being "hewers of wood and the carriers of water", others who dictate in reality, know the role education plays, therefore they have no hesitation in defining their own goals which educational workers are expected to achieve.

Having given the backdrop I now come to a classical example from the best known book in politics : *The Republic* by Plato. We all know that this great piece of political philosophy deals with an essentially moral problem. To put it simply — the question Socrates is asked to answer is "How come that the bad prosper in the world and the good suffer?" *The Republic* starts with a moral question : What is the meaning of Justice or Right? One of the main *agent provocateurs* Glaucon puts forward a form of what was later to be known as the Social Contract Theory, arguing that we are moral because it pays us or we have to be, and that given the chance we should all behave very badly. Adeimantus reinforces him by stressing the comparatively mercenary motives normally advanced for good behaviour. The problem they put to Socrates is to show that, quite apart from motives of self-interest or social approval, morality is preferable to immorality, right to wrong.

While answering this basic question within a framework of a larger context, Socrates eventually defines education and gives a definite direction for making a relevant curriculum. He does not deviate from the main theme even for a moment. For him for a well-governed state one must find some careers for rulers better than government by the truly rich — whose riches consist not of money, but of happiness, of a right and rational life. Socrates warned against providing morally impoverished education because then there can never be good government. "They (immoral leaders) start fighting for power, and the consequent interval and domestic conflicts ruin both them and society" (*Book VII para 521*).

**A-4/206, Kalkaji Ext., New Delhi-110 019.*

For Socrates education consists of five mathematical disciplines — arithmetic, plane and solid geometry, astronomy, and harmonics — followed by a training in pure philosophy or 'Dialectic' in the sense already defined in the *Republic*. With minor concessions to utilitarians, the main stress in education remains on the training of the mind, with the vision of the Good as its ultimate objective, and mathematics is to be studied without any immediate or scientific aim in view.

I have no wish to go on with the Socratic reply to Glaucon but in very brief I have attempted to say that education if it must produce good men cannot overlook its stress on moral goals and a just society must be ruled by good men whose minds are properly trained and who know that to be moral is beneficial to all.

After an example from ancient times we come to our own times where we find numerous committees and commissions — both national and international, attempting to do the same as Socrates had done in the fourth century B.C. One such example is that of Delors Commission (1996) set up by UNESCO.

In its report the Commission has acknowledged the fact that "intolerable disparities that exist between social groups, countries or parts of the world; making good-quality basic education generally available remains one of the great challenges for the end of the twentieth century... The need throughout the world — for the question is not one that concerns the developing countries alone — is for everyone to be in command of the knowledge they require in order to understand the world in which they live." This then is the goal of education number one (p. 116).

More specifically all "pupils should be offered a choice of educational pathways so as to cater for the diversity of their talents and there should be a greater emphasis on guidance, with opportunities for remedial teaching or changes of direction". (p. 116)

The Commission further states : "Choices in education thus concern the whole of society and require the establishment of a democratic debate, not only on the resources to be made available to education but also on its ultimate goals." (p. 157) In other words, the Commission is saying that each society shall have its own distinct variety of education and that too after a good deal of debate which may precede it. That does not mean that non-democratic countries cannot decide about their education. They also do — but that is not the result of any debate but of a fiat.

Interestingly enough Jacques Delors' Commission also admits like Socrates : "It should, however, be remembered in this connection that spending on education has more than just a social dimension; it is also an economic and political investment yielding long-term benefits. The purpose of education systems is to train people for citizenship, provide for the transmission of knowledge and culture one generation leaves to another and develop peoples' talents. Education systems also have to provide the skills economies will need in the future. National development hinges on the ability of working populations to handle complex technologies, and to demonstrate inventiveness and adaptability, qualities that depend to a great extent on the level of initial education." (pp. 165-166)

The idea of the Commission is to create a learning society not of the R.M. Hutchin's type but a different one wihch has new technology to support the formal system — the technologies being (1) computers, (2) cable and satellite TV, education broadcasting, (3) Multimedia, (4) interactive information exchange systems including electronic mail and on-line access to libraries and public data-bases, computerised simulators and virtual reality systems. (p. 173)

This Commission like Socrates has also made goals of education specific and they are : *learning to know* (broad general knowledge plus some in-depth also); *learning to do* (skills and competence to earn); *learning to live together* (understanding others); and *learning to be* (develop one's personality for ability to act and judge autonomously). The Commission regards education a necessary Utopia because it is "the principal means available to foster a deeper and more harmonious form of human development and thereby to reduce poverty, exclusion, ignorance, oppression and war." Once again we come back to the dream of a *just* society where ignorance and oppression etc have no place.

For the benefit of those who regard tensions or conflicts part of human existence the Commission identifies a few tensions. They are : (1) the tension between the global and local needs; (2) while culture is getting steadily globalized, this development being partial is creating tensions between the universal and the individual; (3) the tension between tradition and modernity; (4) tension between short and long term considerations; (5) tension between the desire to excel and equity; (6) tension between the extraordinary expansion of knowledge and the limited capacity of humans to assimilate it; and (7) the conflict/tension between the spiritual and material.

I do not think there are any problems in going along with the discussion part of the Commission or even with what Socrates had said. Unfortunately, there is a point beyond which each one of us has an opinion of our own. For instance, where the Commission assumes that a progressive and affluent society or a technologically advanced society is also a 'developed' society one immediately recoils in horror of accepting this stipulation. Firstly, because 'progress' and 'development' do not exclude the moral dimensions of a being. It would be extremely difficult to justify the action of American government or its people to keep terrorising others. One finds it impossible to agree that they can occupy a high moral pedestal just because they have destructive arms or a better fed society. Similarly, it is equally debatable if Americans are also a happy nation. In a world survey on national happiness it was discovered that Bangladeshis are the happiest lot despite being poor and Indians rank fifth on that scale while the USA is way down the ladder. The question, therefore, is : do we discard happiness as an objective of life just because acquisition of material goods or wealth has generally been found more acceptable as a norm?

The Commission has used economic terms such as 'developed', 'developing' and 'under-developed' as identifiers of the status of nation-states. One need not be overly critical of the use of economic terms to denote the stage of development of a nation but at the same time the distortions such a description brings about in our discourses is normally very disturbing. Secondly, if the use of such terms is directed to justify political actions or oppression of others surely we would be unable to have a universal acceptance. In today's world we find this happening almost everyday. How can we keep our education away from such concepts that are floating around?

We have a much more serious problem than the one just stated in the form of goals of life emanating from the West. With the advancement of technology it is no longer possible to remain isolated. Even a nation like North Korea is not totally isolated. Without using the cliché term like 'global village' one could accept the reality that fashions, material goods and services, even personal mores besides professions and styles of life are getting to become homogeneous across the world. Even the local entertainment is becoming folk and the other one urbane and civilized. Recently in towns and cities we witnessed the arrival of Valentine's day even when the majority of Indians have no idea about its significance. This then is the change — how does one face it has become a personal problem.

In a highly structured society like ours where prejudices govern the styles of life, where violence and intolerance are the order of the day, where the ones who should provide protection to others are themselves in need of protection, where concepts like democracy, religion, peace, harmony, brotherhood, truthfulness etc have acquired new flavours and import, it is difficult, let alone risky, to expect education to do anything substantial. With fundamental changes in societal and individual dreams and goals it is only natural that education as a tool should fall into wrong hands. Today's teachers are nearly as politicized s the others and, therefore, to think of present day teaching community to retain its disarmingly paternal or guardian-like role is unrealistic. There are numerous questions whose answers even the wisest among us may fail to find. For example, whose education are we talking of ? When we know that the upper crust of Indian society has adopted Western style of life — food, dress, social life, entertainment, language and similar other things; and when we know that increasingly Indian middle class is also cutting itself off its roots from the native soil; and where we can witness everyday a government or municipal school is being classed a low-performing institution meant only for the poor and the waiting time for a job is anything between zero and 11 years — then whose education are we talking of ? With a vast chunk of Indians remaining outside the system what education could mean anything to this class ?

And knowing as we do that goals of education are socially determined with individual preferences being incorporated from time to time our system of education is already responding to certain requirements. If given a chance it would gain strength but the major problem we face is that of political direction. I doubt very much if the teachers themselves can take any decision with regard to education they propose to provide when even textbook content has to have political sanction or approval. We cannot blame our political leadership alone for the mess we are in. Teachers when given the opportunity have themselves proved to be their worst enemies by being more politicized than a non-teacher politician.

Before concluding I propose to answer three questions.

The first question is : Can we predict future with any degree of certainty and if yes can we do something about it?

I think the answers to both parts of the question are in the affirmative. There are numerous scholars

and scientists who have been predicting the shape of things to come. From Toffler's *Future Shock* to Clarke's *The year 2000* the number of answers we have is just innumerable. Aldous Huxley in his powerful novel *After Many a Summer Dies a Swan* had talked of a discovery which increased infinitely the life span of a human. Similarly, the exact nature of change being unpredictable educationists have stopped talking of learning *per se* but find learning to learn better way to cope with the speed and quantum of change.

In India where the system itself is so diverse and inadequate both in terms of class and facilities one could safely predict that while part of the nation can match up with the best in the world, the majority may not know exactly what struck them dumb. To expect that the government alone can do much is to dream in a vacuum. One gets to become uneasy when one thinks of our slimy and scheming political leadership operating in their all too familiar grooves of religion and caste for their personal ends at the cost of others including the nation. In a scenario like the present one saner and wiser voices have little chance of being heard. Also, it takes long to act purposefully and any proposal against the class system are unacceptable to the mighty. The case in point is Kothari Commission's recommendation of a common school; or the most primitive and faulty system of examination legitimized by the CBSE. We are even now citing Yash Pal Committee report when it is known and countered by so many besides Delors' Commission as well, that memory cannot be replaced by understanding and memory has to provide a base for understanding without which learning may not be possible.

Marred by lack of vision and coherent action only a partial appreciation of the coming changes is possible in India. One cannot be overly enthusiastic about the national response. Chances are that class barriers would get additionally reinforced.

The second question pertains to the role our education would play in the process of its re-engineering?

I have already commented and even mildly suggested that education being an instrument cannot assume the role of a major player. While the decisions have to be both societal and political, aided and supported by a developed economy, education would retain the status of a minor player. I would only warn the education freternity not to run away with the idea that since society rates teachers highly (*see* Aditya Birla Group Opinion Poll excerpted in the *Times of India* Jan 31, 1999) they alone could do wonders. A recent study, still in the report writing stage, suggests and that teachers and guardians put together can do much in this regard.

This third question though vague purports to suggest that next century which is round the corner would revolutionise the world. Let me say unambiguously that Time like Space is beginning less and endless, therefore, it unfortunately, does not record the milestones in human terms.

Let me conclude with a quote from *Chhandogya Upanishad* that education is Enlightenment and Reality is unknown. King Janak once asked Yagnavalkya, his court teacher-scholar, what is Real? In his dream, King Janak had seen himself a pauper unable to collect even a morsel of food but in his waking state he found himself a mighty and affluent person. What then was Real — the dream or the waking state? The Sage answered : Neither.

Time is its own response and all of us have our assigned roles.

Material Production and Distribution of Study Material in an Open University

A Model

Rajendra Singh*, M.S. Sodha**
R.D. Pathak†, D. Kaul‡

Introduction

Preparation and distribution of course material is a crucial aspect of the operations of an open university. An efficient and effective production and material distribution of course material, has to be based on good knowledge of printing and distribution. The preparation of study material has been revol·tionised due to the advent of computers and networking in printing, hence it is essential that the Material Production & Distribution Division (MPDD) system should incorporate the latest trends in this field.

Keeping in view the role of open universities in the field of distance education, the MPDD in such a university is expected to fulfil the following objectives :

(a) To provide relevant reading material to the students, regional centres, study centres, open university, other institutions, agents and general public.

(b) To ensure the readability, correctness and understandability of the reading material.

(c) To ensure good presentation of the reading material, using latest quality control techniques.

(d) To adhere to the time schedule, procure paper, identify private presses and distribution of printing material to the above agencies.

(e) To make realistic budgetary allocation and adhere to the same.

For fulfilling the above objectives, the following methodology is suggested keeping in view the latest system approach :

(a) Academic Calendar : Preparation of academic calendar with details of comencement and ending of various courses.

(b) MSS : Manuscript (MSS) preparation by respective competent subject panels well in advance, keeping the printing schedule in mind and data entry/scanning of the study material in the Intranet server. (The computer that can be accessed by all relevant schools as well as the schools heads from their PCs).

(c) Online Approval : Online approval of the material by the appropriate academic body.

(d) Budgetary Planning and Budget Estimation : Based on number of booklets, number of copies and pages in each booklet estimation of paper requirement, printing charges and distribution charges; the budget estimation will be carried out.

(e) Finalisation of material to be printed : Final check, including correctness of as well as the spellings (the spell-check software facility can be used) by the respective Directors' office.

(f) D.T.P. Work : Main server will be located at MPDD office, Formatting including selection of type, margin, header, footer, paragraphs, sub paragraphs, alignments etc. will be done by the MPDD office. This activity will also be carried out online and the final output will still be available in the server for respective schools to make any last minute modifications/improvements. Final printout in the relevant forms for printing purpose will be taken out in MPDD.

(g) Placing Orders in Press : Keeping the following points in mind orders will be placed for printing, according to the following sequence :

  (i) Approval by the university;

  (ii) Instead of splitting, each press will be allotted complete course material (course-wise, semester-wise, subject-wise) so that complete set will be delivered directly by the press.

  (iii) The performance of the press (quality and timely delivery) should be assured.

(h) Water Mark : Open University water-mark symbol will be provided to the mill for marking the

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paper at the time of manufacturing. This will result in multiple benefits as explained later.

(i) Own Press : The feasibility of having an open university press with Digital Printing (Print-on-Demand) should be examined. The digital printing will facilitate scanning, printing, binding of even internet material at a very high speed. All emergency booklets can also be produced the same day.

(j) Quality Control : (i) Site inspection. (ii) Delivery inspection. (iii) Acceptance.

(k) Distribution : Distribution of the study material to students, study centres, regional centres and other agencies through cost effective method arrived at, after due analysis, distribution by the press should be considered seriously.

(l) Payment : Payment of the complete charges (online calculation ensuring exact estimation).

Benefits of Introducing Intranet

In the above methodology, the reading material is entered/scanned only once in the computer. After that corrections and approval, publication etc. are done through respective PCs of schools which are on the Intranet. So there is neither duplication of efforts nor any requirement of paper transactions. Therefore this system is an online system as all data is moving only through Intranet and not through paper.

This has an added advantage of even online distribution provided all regional offices and study centres in India and abroad including Intranet of open universities are on the Internet. The advantages of this system over manual (existing) system are as follows :

(a) Efficient in terms of time and accuracy.

(b) Money Saving due to paperless transaction and fast movement of data.

(c) Quality in terms of printing media.

(d) Accuracy and correctness of the subject matter due to facility of modification till the last minute.

Role-set of MPDD at Open University

Role as a Leader

(a) To be visionary.

(b) To make team members self motivated and maintain that.

(c) To exceed target to any limit utilizing full potential of human resource.

Role as a Manager

To plan, organize, execute and control activities to achieve targets.

Role as a Team Member

To contribute as an effective team member

(a) With seniors

(b) With peers

(c) With subordinates.

Objective

At Country level : Promoting mass education (Education at all levels).

At Open University level : Promoting Higher Education.

At Material Production and Distribution Division level

Servicing the students, regional centres, study centres, open universities, other institutions, agents, general publics etc with timely supply of study material of right quality in the required quantity at most competitive price.

Existing Operations at Open University

(1) Receiving list of registered students from student registration and evaluation division and other agenceis and ordering study material, based on it.

(2) Budget allotment for paper purchasing, printing charges and distribution based on previous experience and additional anticipated demand.

(3) Tender for paper purchasing.

(4) Selection of the presses for printing purposes under university rules.

(5) Finalization of paper mills/agencies and private presses for printing work and placement of orders approved by purchases committee/authorised committee.

(6) Paper Purchasing and Delivery : Procurement of paper and stocking of open university store and payment as per terms and conditions :

(a) Despatching of paper to the presses as per number of booklets allotted for printing work.

(b) Keeping the record of paper despatch and balance with the store.

(c) Paper loading from open university store.

(d) Paper unloading to private press.

(e) Transportation arrangement (either from O.U. or hired)

(f) Expenses for transportation.

(g) Loading and unloading expenses (labour charges).

(h) Spoilage of paper during transit and loading/unloading.

(7) Manuscript and Printing : (MPDD) hand over manuscript (received from various schools) to the private presses for DTP work. The following steps required in this operation are :

(a) Receiving the manuscript from various schools by MPDD.

(b) Handing over the Manuscript to private presses by MPDD.

(c) Receiving first proof from private presses by MPDD.

(d) Checking first proofs (proof reading) by the relevant schools (having submitted their manuscripts).

(e) Sending the first proofs to the private press for correction purposes by MPDD.

(f) Correction to be carried out at private presses.

(g) Receiving second proofs by MPDD and final checking by relevant schools.

(h) MPDD finally hands over final proof duly checked, to the concerned private presses.

(8) Distribution : Receiving the different printed booklets from the private presses :

(a) Receiving the printed booklet from private presses by MPDD

(b) Arranging the booklets received from different presses for making the sets as per requirements received for distribution to various places.

(c) Preparing the sets for despatch to the various concerned places.

(d) Loading the material from the open university store for despatching to various places.

(e) Systematic stocking of printed booklet involving a lot of paper work for record purposes occupying lot of space storage area.

(f) Manpower as per quantum of work is required for carrying out such operations.

(9) Payment : Payment as per rules as terms and conditions to the printing press.

Proposed Setup at Open University

(0) Forecasting the demand of booklets based on previous experience and projections in coordination with planning division.

(1) Receiving list of registered students from student registration and evaluation division and other agencies.

(2) Budget allotment for paper purchasing, printing charges and distribution based on previous experience and additional anticipated demand.

(3) Tender for paper purchasing.

(4) Selection of the presses for printing purposes under university rules.

(5) Finalization of paper mills/agencies and private presses for printing work and placement of orders through purchases committee/authorised committee.

(6) Paper Purchasing and Delivery : Paper purchasing as per open university rules from paper mills (water mark of the university will be used during manufacturing of the paper) Paper Mills to deliver paper direct to private presses in required quantity as instructed by MPDD from time to time (rather than in bulk).

The following benefits will accrue by adopting the above system :

(a) Time saving.

(b) Money saving.

(c) Manpower saving.

(d) Transportation expenses saving.

(e) Stocking at open university no longer required.

(f) Private press cannot use O.U. water mark paper for other work ensuring judicious use of paper by eliminating misuse of paper for other work.

(g) Standard of the paper will be maintained.

(7) Final Tracing and Printing : The Intranet facility will enable MPDD office (where main server is located) for DTP work duly updated by concerned schools, thereby eliminating time consuming activities listed at Para 7 (of existing operation at O.U.) and thereby saving of expenses associated with such activities, besides increasing efficiency and accuracy in the system.

(8) Distribution : Each printing press should be allotted the number to be printed on various booklet which they have to print coursewise/semesterwise/mediumwise so that each printing press is responsible for printing and preparing the complete set of booklets pertaining to specific course and be asked to despatch direct to the places as per the list provided/monitored by MPDD. MPDD will ensure at every stage of operation the correct procedures being followed by the printing presses.

The details for despatch/distribution will be provided by open university to private presses alongwith addresses and quantity of booklets, regional centres, study centres, open university, other institutions, agents, general public plus extra stock to be retained by open university, for unexpected future requirements.

Payment : Complete payment record as well as inventory record to be maintainted by computer at MPDD office.

Existing Paper Purchasing and Inventory Control Procedure

A. Budget allocation in university. Allocation as per previous year data + new course and new demand.

B. Paper purchasing as per university rate through open tender, finalization of tender for purchasing of paper by Purchse Committee meeting.

C. Receiving of paper from approved paper mill at open university store.

D. Distribution of paper to different private presses from open university store as per booklets allotted for printing to each press.

E. Calculation and maintenance of store by traditional method.

F. Payment of transport loading, unloading from open university to private presses resulting in loss/damage etc in transit.

Proposed Paper Purchasing and Inventory Control

A and B are same, Order directly to selected Paper Mills to despatch paper specifying required quantity to the Printing Presses.

At the time of paper manufacturing, water marks will be used which will have their own identification to avoid pilferage and misuse.

The system will ensure judicious use of paper resulting in economy and money saving.

The important points are :

Open university paper cannot be used in other jobs due to water mark.

Duplication in printing will easily be checked because of absence of water mark.

Open university paper standard can be maintained.

Calculation of paper supplied, payments due and to be made, etc on the basis of online computer facilities.

Huge amount can be saved on transportation, loading, unloading, stocking, re-routing from press to open university and back to agencies.

No need of storage space for keeping the paper stock at open university.

Manpower will not be required for loading and unloading and maintaining stock of open university.

A very limited stock will be kept for emergency.

Since the paper mills will be asked to supply required quantity from time to time (Just-in-Time) to the printing presses, bulk purchases will not be resorted to and therefore blocking of money in piled up stocks will be avoided.

Existing Distribution Procedure

Delivery of material (every semester), to students and of application forms, booklets, assignment, and required quantities of the material to regional centres, study centres, open university, other institutions, agents, general public, etc by the university.

Existing

A. Receiving booklets from different printers.

B. Ensuring that the booklets received from presses are sufficient/complete to make the packets/sets as per the required quantity to be sent.

C. Making packets/sets by the open university staffs as per list of students, regional centres, study centres, open university, other institutions, agents, general public etc.

D. Despatch by post or courier.

Proposed Distribution Procedure

Coursewise printing order to private presses.

As per list provided the packets will be prepared and delivered directly to the students, centres and all other agencies from the private presses and bal-

ance booklets will be received by the open university to meet contingencies.

Further distribution can also be made possible through study centres to the required/registered students packet/set delivered through transport or courier to the individual students.

Benefits of Proposed Distribution Procedure

It does not require additional staff for making packets/sets. It will be prepared in private presses as per the list of delivery that has been provided to them.

Transportation expenses and loading and unloading at open university eliminates various activities and thereby saves considerable time and money.

The direct despatch from the presses the complete set (coursewise) to the various centres/agencies will ensure timely receipt of completed sets whereas in case of existing system, the set is split and given to different presses and finally on receipt of complete set, the set for despatch is prepared. This leads to unusual delay because a set can only be despatched on completion.

Methodology of Distribution of Study Material

(1) Freshly enrolled data in respect of students through internet from various regional centres in text form.

(2) Previously enrolled data of students semesterwise through internet from various regional centres in text form.

(3) A main server will be loacted at "IGNOU Campus — MPDD Office" to maintain consolidated data studentwise, subjectwise, semesterwise and addresswise with allotted regional centres.

(4) Specific student list (subjectwise, semesterwise) should be matched with coded booklets to arrived quantum of booklets required.

(5) Data for grouping of booklets to be generated of common sets (even set) and odd sets.

(6) Continuous updating of record of grouping of booklets.

(7) Miscellaneous requirement (regional centres/study centres/open universities/other agencies and institutions/agent/general public) in addi-

INDIAN NATIONAL ACADEMY OF ENGINEERING

(An autonomous Institution under the Ministry of Science & Technology, Govt. of India)

Awards for Innovative Potential of Students Projects

The Indian National Academy of Engineering (INAE) with the support of the Department of Science & Technology, Govt. of India has launched a scheme to confer awards to the students projects conducted with a bias towards technology application in industry and research laboratories.

1. Nominations are invited from the **Head of the Institutions on two best student projects at BE/B.Tech, ME/M.Tech, and Ph.D. levels in the engineering disciplines** — Civil; Mechanical; Electrical, Electronics and Communications; Computer; Chemical; Aeronautics; Metallurgy and Materials Science, and allied fields during the academic year **1997-98 for PG** and **1998-1999 for UG.**

2. The awards will be **Rs. 5000/-, Rs. 10,000/-** and **Rs. 20,000/-** for B.Tech, M.Tech and Ph.D. respectively.

3. **Two page write-up in A-4 size paper** may be forwarded by the Institutions giving (a) Name of the Institution, (b) Postal address, (c) Telephone/fax/email, (d) Name of the student and educational qualifications, (e) Brief summary of the project and (f) Authenticated signature by Head of the Institution.

4. The Institution should be prepared to send complete project report/thesis alongwith relevant documents at short notice for final assessment.

Nominations are to be addressed to Indian National Academy of Engineering, 117 Nalanda House, IIT Campus, Hauz Khas, New Delhi-110 016 preferably through fax/email (Fax : 011-6856635; Email : inae@nda.vsnl.net.in Tel : 011-6968475, 6968635) to reach the **Academy latest by 5 April 1999 for PG projects and 5 June 1999 for UG projects.**

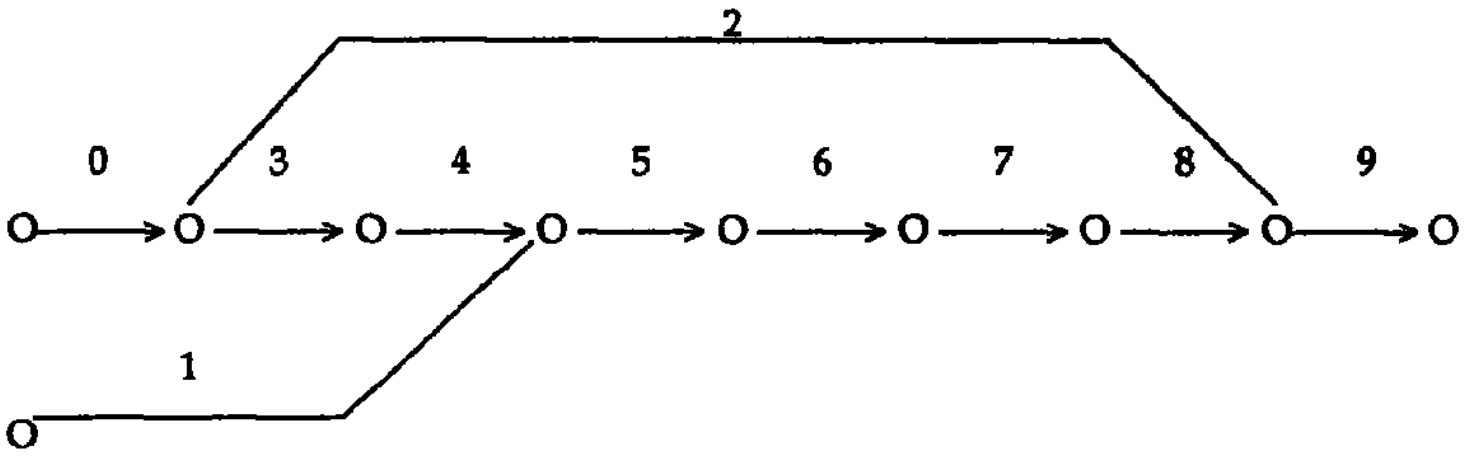
tion to quantum of grouping of booklets worked out as above.

(8) The gross requirement of booklets by now will be available on the server.

(9) The detailed list of students with their addresses enlisting complete detail of booklets required by each students (even as well as odd lot) together with miscellaneous requirements.

(10) The above information to be shared by all concerned (Evaluation cell, Finance Division, Regional Schools, Regional Centre and other) for co-ordination.

Network-Analysis for Expected Savings
(based on proposed setup of MPDD at open university)



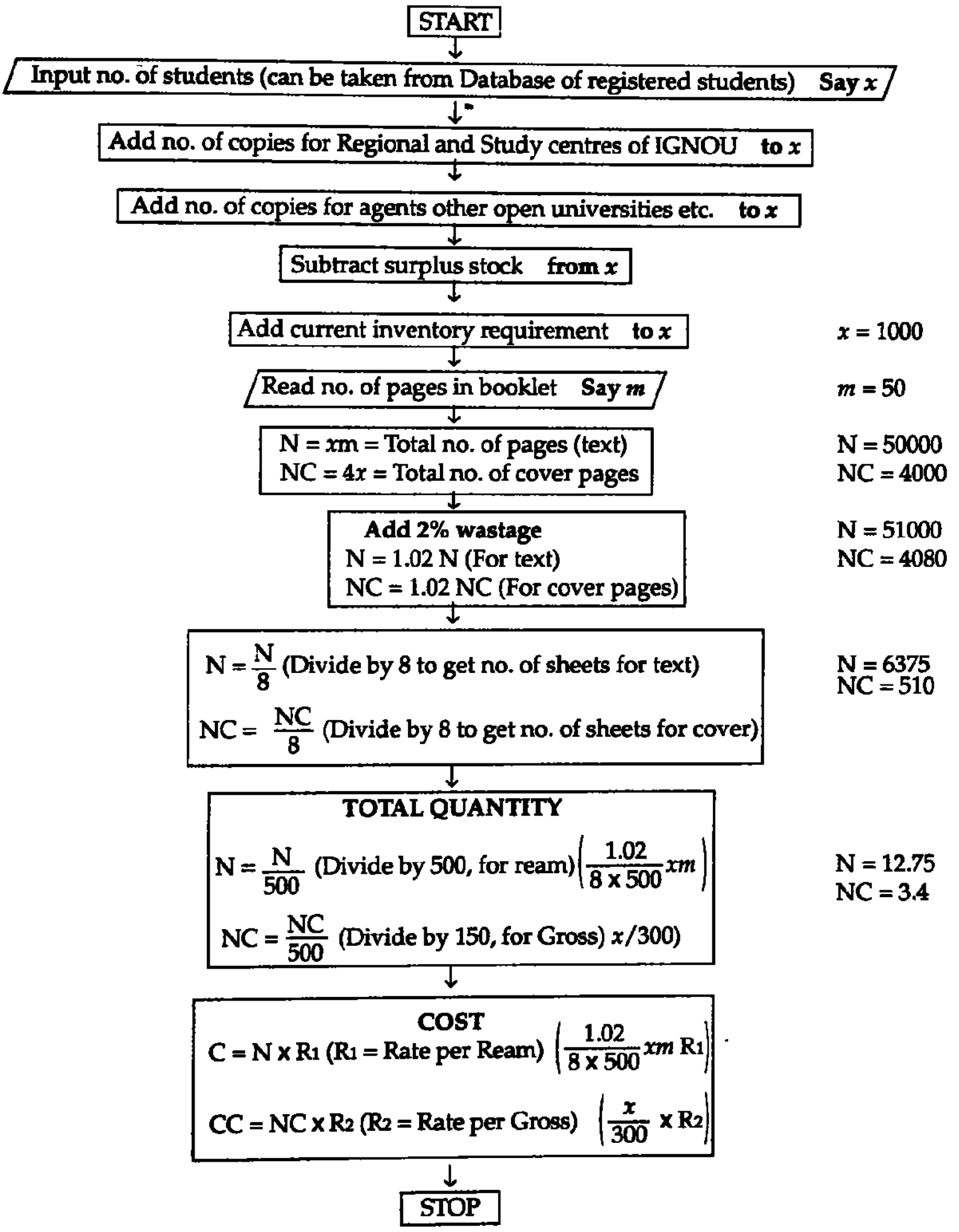
S.No.	*Main Activity Number*	*Activity Description*	*Expected Saving*	*Remark*
1	0	Forecasting	—	Improved Quality and Time
2	1	Receiving Registered Students List	—	—
3	2	Budget Allocation	—	—
4	3	Tender for Paper	—	—
5	4	Selection of Presses	—	—
6	5	Final Order for Mill and Presses	—	—
7	6	Paper Purchasing and Delivery	15 days + manpower	Improved Quality, Time, Saving and Maintain Standard
8	7	Final Tracing and Printing	15 days + manpower	Improved Quality, Time and Saving
9	8	Distribution	30 days + manpower	Improved Quality, Time and Saving
10	9	Payment		

Flow Chart for Calculating Consumption of Paper and Cost

Databases

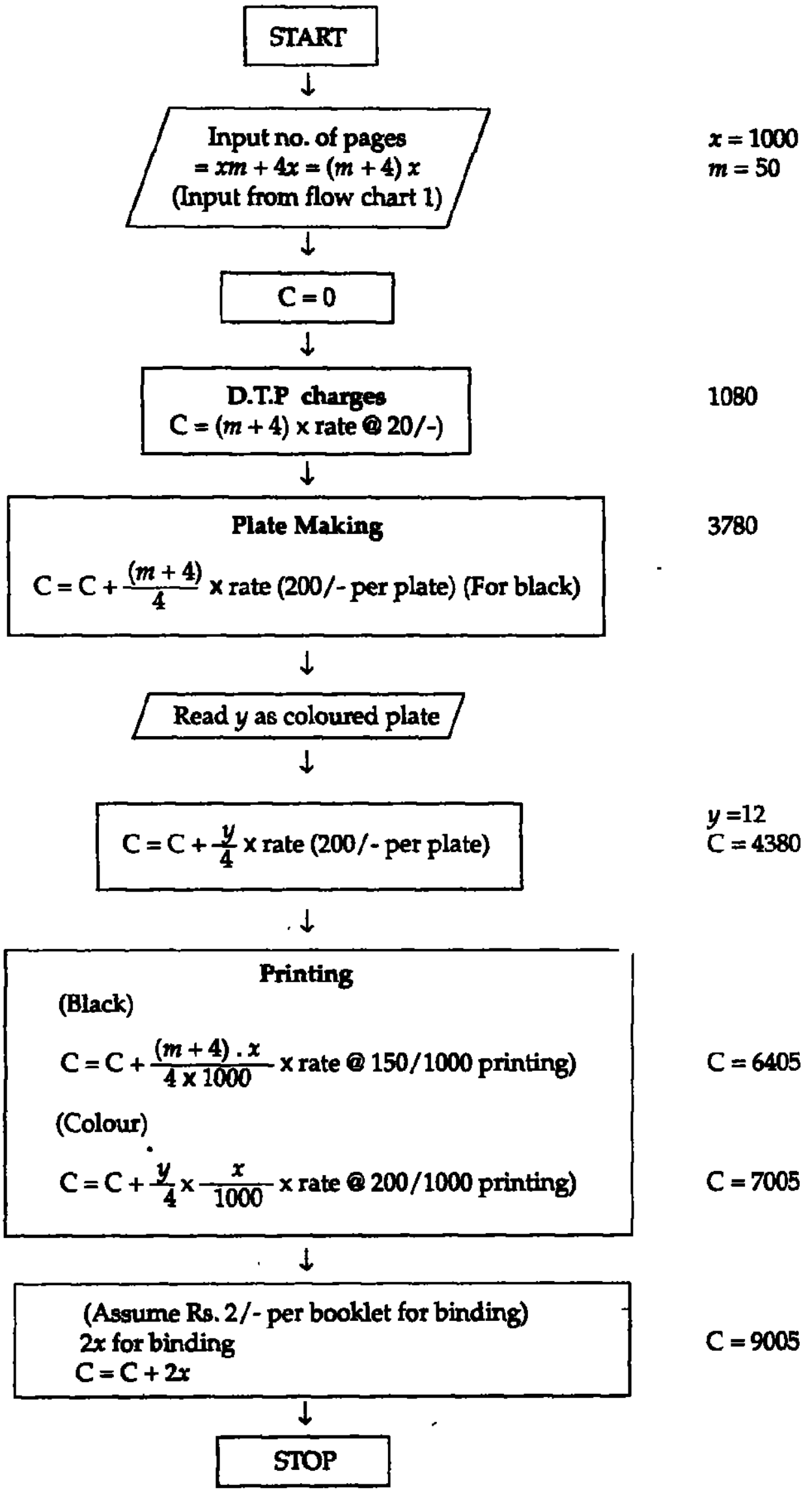
1. Students (Registration)
2. Regional centres/Study centre/Open university/Others.
3. Booklet database, (Name, Code, No. of Pages etc.).

Flow-chart for calculating consumption and cost of paper for specific booklet. (Paper size Demy)

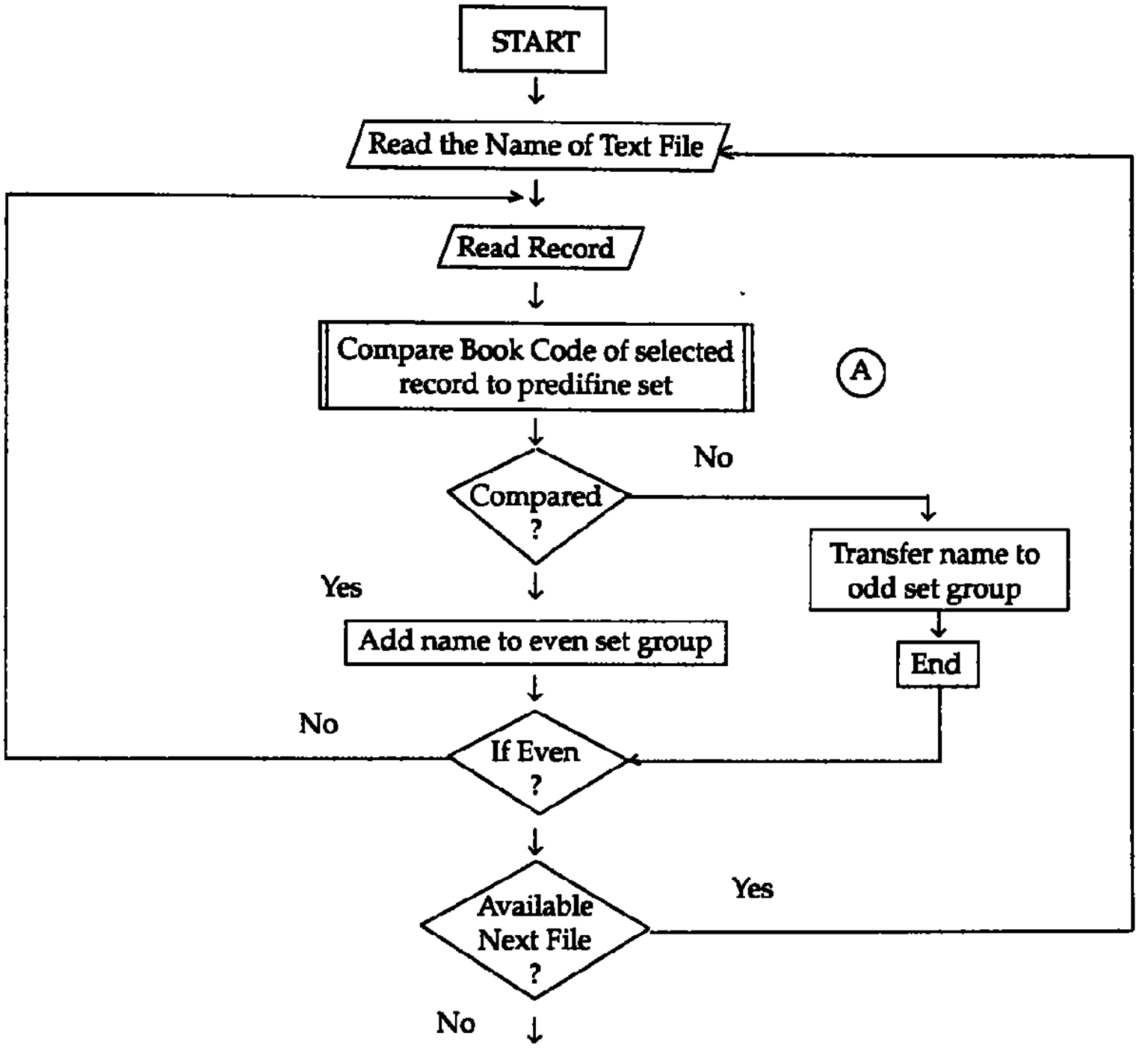


Flow Chart for Labour Charges

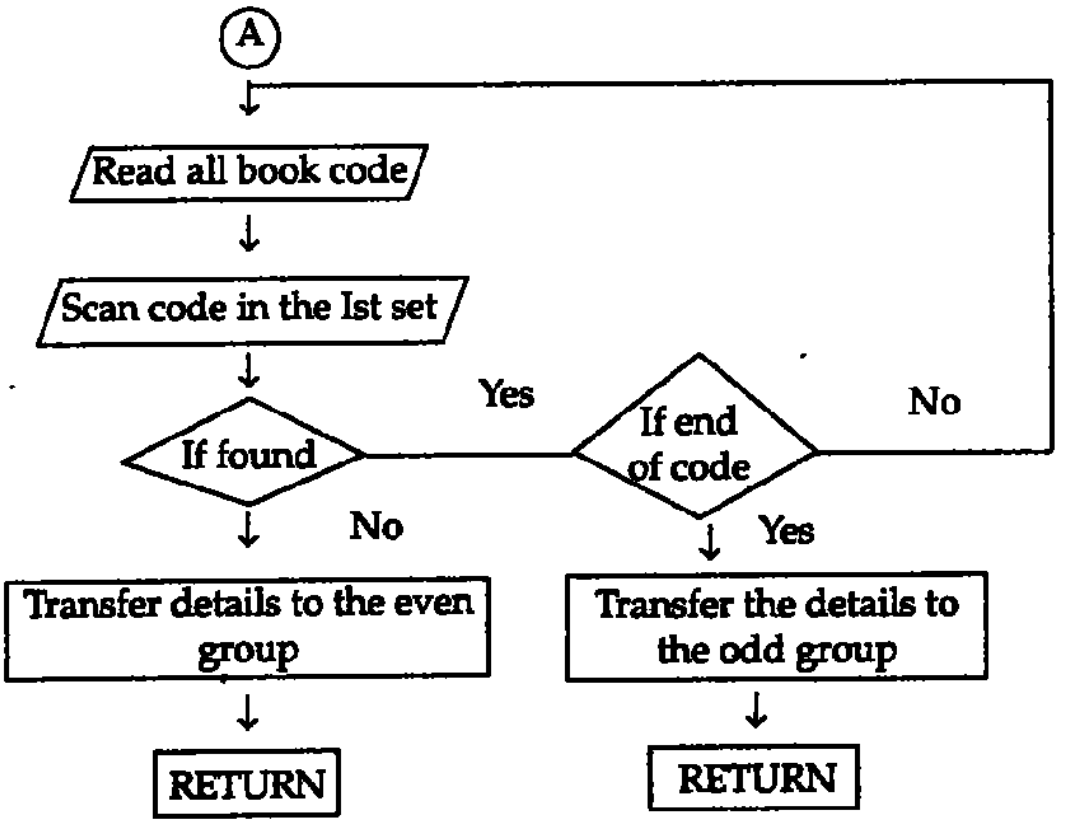
Flow chart for Printing Labour Charges for specific booklet. (Paper size Demy)



Flow Chart of Study Booklet Calculation



COMPARISON



Measuring Professional Competence
New Evidence

Meena Hariharan*
I. Ramabrahmam**

The first and prime duty of a teacher is to teach though research and extension services do constitute important aspects of the profession. Therefore the vital approach of evaluation must be on teaching skills of the teacher. This raises two crucial questions. The first one is 'who' should assess the teaching skills, and the second one is 'how' or against what standard can one access the teaching skills of a teacher? While the first question is being actively debated among the teachers, the second one is more confusing with not many concrete suggestions.

The debate on the empowerment versus capabilities of evaluating a teacher has two dimensions to it. While those who advocate teacher evaluation by the students do so with the strength of argument that if the final aim of teaching is to enable the students to learn, 'how much of what is taught is learned' constitutes the real assessment. This can be judged only by the students. Academic tradition in various countries adopted student evaluation and viewed it with utmost objectivity and considered it as a scope for improving teaching skills. However, Indian academia has time and again questioned student evaluation. *Portia* (1981) reported that majority of teachers favoured external evaluation. *Chandra* (1982) voicing the general reservation of teachers about student evaluation apprehended that it could create tension in the institutions. On the other hand, there is also a fraction of teaching community which preferred student involvement in teacher evaluation (*Swaraswati* 1976; *Singh and Lal* 1984; *Hariharan*, 1997). In this debate of who should be evaluating teacher's performance, more or less a compromise could be struck, where student evaluation is not opposed when it is in combination with self, peer and external evaluation.

The second question as to 'how' or against what can one's teaching be evaluated appears to be a live wire. A number of questions are raised on the concept of 'good teaching.'. Innumerable intervening variables are cited to be vitiating the objectivity of assessment. If a 'good teaching' is defined as that which facilitates learning; then the questions on the variance in student's lives of cognition and motivation, and heterogeneity of the classroom have a chance of turning the student perception highly subjective. Assigning due weightage to this argument some researchers have attempted a combination of self evaluation (*Hariharan* 1997). The results of such attempts have been encouraging. Aubrecht (1979) reported positive correlation between student ratings and ratings by self, peers, and administrators. Marsh, Overall and Kesler (1979) also found a positive correlation between students and self evaluation. On the other hand, Blackburn and Clark (1975) found a low correlation between evaluation by self, students, administrators and Peers.

The Present Study

An attempt was made to study the correlation between the evaluation by self, peers and experts on one's teaching skills at the Academic Staff College, University of Hyderabad.

Sample

Thirty-five teachers with the teaching experience ranging from a few months to eight years, who came to attend Orientation Course in Academic Staff College, University of Hyderabad formed the sample. These teachers came from all over India and belonged to various disciplines.

Procedure

As part of training each teacher was asked to choose any topic of his interest and teach the same in a simulated classroom comprising their trainee colleagues. The time given was 10 minutes. They were informed that their teaching would be assessed on the criteria of method of teaching but not the content load.

The teachings of all the teachers were video recorded. Subsequently, the cassette was replayed and viewed by the whole group of teachers along with an expert. They were asked to assess the teaching from the angles of approach to the topic, expression and conclusions. Minimum marks was decided to be 30. They were also asked to assign some marks to one's own teaching when their performance was replayed. Apart from this, after each replay, the individual concerned was asked to give a qualitative

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analysis of his/her own teaching by identifying his own strengths and weaknesses. The peers and the experts reinforced the same with their observations.

Findings

It was found that barring a negligible few, the qualitative analysis of self and peers followed the same direction while the expert feedback supplemented the same with a few more additional observations.

However, when it came to quantitative assessment, there was an absolute lack of correlation between the three sources. The erratic swings of assessment can be perceived from Table 1.

Table 1 : Absence of Correlation between Self, Peer and Expert Evaluation of Teacher

	No. of observations (N = 35)
1. Self evaluation lower than mean peer evaluation	11
2. Self evaluation higher than mean peer evaluation	18
3. Mean peer evaluation higher than expert evaluation	14
4. Expert evaluation higher than mean peer evaluation	18
5. Self evaluation higher than Expert evaluation	16
6. Self evaluation lower than Expert evaluation	13

Correlation Between Self and Peer Evaluation

The correlation between self and peer evaluation was found to be very low and not significant. In eleven out of thirty-five, the self evaluation was found to be lower than the mean peer evaluation. In eighteen cases, the teachers were found to over-estimate themselves with higher marks than the mean scores of peers. Only in the remaining six cases, the self assigned marks coincided with peer assigned marks.

Correlation Between Expert and Peer Evaluation

The correlation between expert and peer evaluation was found to be very low at .065. In 14 cases, the mean peer scores was invariably very high compared to the score assigned by the expert. On the other hand in 18 instances, the experts scores were found to be higher than the the mean peer scores. Only in three stray cases the expert and peer evaluated scores were close to each other with a variation of one or less than one mark.

Correlation Between Self and Expert Evaluation

The correlation between self and expert evaluation was found to be 0.129 which is not significant. Comparing self evaluation with Experts evaluation it was found that in 16 cases the self evaluation was found to be higher than Expert evaluation while in 13 cases the self assigned scores were found to be lower than the expert's scores. Only in six cases, the self assessment matched with Expert assessment.

With the above observations, one may ponder as to 'how' the expert, peers and the teachers viewed the teaching performance of themselves and peers. The low values of correlation talk about the absence of a standard against which the teaching is assessed.

At this stage of the new era when the quality of higher education is so much in debate and at a juncture where society on the one hand is questioning the accountability of teachers, and the teachers on the other hand are demanding autonomy, no conflict can be resolved and no solution can be reached if the concept of quality of teaching is left to loose abstraction.

It may be difficult, but not impossible to evolve a standard against which teaching can be assessed. One has to identify the basic components involved in teaching. Teaching is a complex process. 'Delivering good teaching in the classroom involves a number of skills that constitute teacher competence.

With an intention to identify these skills, Hariharan (1997) came out with a new approach to evaluate teacher's performance. Teacher competence score was developed by obtaining student rating scores and teachers self ratings on five different aspects such as (1) Planning and preparation, (2) Innovative classroom teaching, (3) Motivating students, (4) Enforcing classroom discipline, and (5) Reinforcing activity such as assignment and evaluation. All these aspects as can be observed are directly related to classroom teaching.

Two separate rating scales were developed for teachers and students separately addressing the five aspects mentioned above. Teacher competence score was developed assigning weightages to the components and teachers' and students' assessment. With this, the teachers could be divided into clusters, varying in the levels of competence.

In the absence of any definite yardstick, teacher competence perhaps can be measured on these lines to address the question of teacher evaluation and professional accountability. Stonewalling the moves to open up the teaching profession to quality audit raises doubts about its transparency. Student evaluation should be welcome. However, all evaluation, especially the evaluation by students must precede adequate training to students about the components that constitute teachers competence. This would resolve the problem of subjectivity regarding the 'standard' followed in evaluation of teaching.

Awareness About Educational Technology
A Study of Forestry Institutions of U.P.

Amardeep*
B.B. Singh**

It is through education that learning inputs are injected into subjects to bring about desirable learning outcomes in behaviour. But many a time, it is observed that there is much variation in the expected outcome and the actual outcome. Ultimately, a feeling grows that excellence in education is not yet achieved. The non-achievement of excellence is attributed to certain deficiencies in the education system or more particularly to the lack of effectiveness of educational process. 'Population explosion' and 'information explosion' have changed the entire scenario of education. The teachers find themselves in a difficult situation. They are supposed to pass on huge content of information to the students in a limited time. The teacher taught ratio which used to be about 1:10 in forties and early fifties, and about 1:20 in sixties is now about 1:40. This has resulted in lesser effective interaction between the teacher and the taught. As a result of 'information explosion' the biological knowledge when compared to its extent in 1900 is reported to have increased 4 times by 1930, 16 times by 1960 and 30 times by 1970. It is estimated that it will have increased 100 times by the year 2000 (*Kesarwani, 1988*).

Educational problems are not limited to population explosion and information explosion. Overburdening of teachers, inadequate library facilities also yield ineffectiveness (*Jalihal, 1970*). Lack of suitable textbooks, poor teaching facilities, lack of readily available visual aids and equipment, poor lighting and ventilation, general unattractiveness of classroom are the serious difficulties in teaching (*Russel, 1970*).

Lack of knowledge and skills in educational technologies, low level of awareness about instructional materials and methods put teacher in a 'helpless' situation.

The classroom is the world's first deliberately designed instructional system, but there are many signs that it is no longer suited to society's needs. A feeling grows that classroom teaching is ineffective. In order to improve the scenario of education in developing countries, we should go for a technological solution, rather than the conventional one that has not answered the educational needs. (*Tiffen, 1981*).

Educational technology, that is, the systematic application of knowledge of physical and behavioural sciences to the practical task in education, is the answer to educational problems. It can make education productive, more individual, more powerful, bridge the gap between the world outside and the world inside the classroom and provide more scientific base to instruction. Thus the potential of educational technology can be explored to achieve excellence in education. (*Commission on Instructional Technology 1970*).

The effective use of educational technology will be out of question, unless institutions have these and teachers are aware of them. Even the availability of instructional materials, methods or devices is meaningless unless its intended users are aware of these. Several studies conducted so far, are mainly focused on constraints, extent of use, effectiveness and availability of educational technology, but awareness aspect has not been given proper attention. Thus a need was felt to analyse the awareness of teachers about educational technology. The objective of this study was to assess the level of awareness of teachers about instructional materials, devices and methods.

Research Methodology

This study was conducted in 4 higher education institutions (universities) of UP. Out of 4 selected institutions, one was central govt. run institute i.e. Forest Research Institute — Deemed University, Dehradun, one State Agricultural University i.e. G.B. Pant University of Agriculture and Technology, Pantnagar and two traditional universities viz. Kumaun University, Nainital and Hemvati Nandan Bahuguna University, Srinagar, Pauri Garhwal. Population census method was used to collect the data from all those teachers in each institution, who were engaged in imparting formal education in the field of forestry.

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In order to meet the objectives of the study; exploratory research design was used. A comprehensive, pre-tested and corrected interview schedule, containing structured as well as open-ended questions was used to collect the responses from teachers. Degree of familiarity of teachers with different instructional materials, devices and methods was used as an indicator of awareness. In order to measure this aspect, a list of selected materials, devices and methods was prepared, and responses were collected on five point continuum i.e. 'not heard', 'heard only', 'know', 'can use/produce' and 'can explain/guide to other people'. A score of 0, 1, 2, 3 and 4 was assigned to each response, respectively. The sum total thus obtained was used as indicator of awareness. Total weighted score (TWS) was used to measure the awareness about individual items. In order to formulate the categories of overall awareness, arithmetic mean and standard deviation were used. Data were pooled for the analysis and interpretation.

Findings

Overall awareness

Table 2 reveals that in case of overall awareness about instructional materials, majority of teachers (58.9 per cent) was 'moderately aware' followed by those who were 'less aware' (25.6 per cent) and 'highly aware' (15.3 per cent). Distribution of teachers on the basis of awareness about instructional devices was found as 'moderately aware' (41.0 per cent), 'highly aware' (33.3 per cent) and 'less aware' (25.6 per cent). Majority of teachers (58.9 per cent) was 'moderately aware', followed by 'highly aware' (32.3 per cent) and 'less aware' (7.6 per cent) as far as instructional methods part was concerned.

Table 2. Overall Awareness about Educational Technology.

Categories	Percentage of Teachers		
	Instructional materials	*Instructional devices*	*Instructional methods*
1. Highly aware	15.3	33.3	33.3
2. Moderately aware	58.9	41.0	58.9
3. Less aware	25.6	25.6	7.6

Relative awareness

It is clear from Table 1 (page 18) that out of highest possible weighted score (156), total weighted score (TWS) for chalk board was found maximum (137) indicating maximum awareness, followed by graphs (133) overhead transparencies (131), slides (118), posters (118), charts (117), specimen (115) and models (112). TWS for other materials viz. video cassettes, audio cassettes, programmed instructions, teletext, videotext, computer assisted instructions and instructional television broadcast, varied between (50-110), indicating comparatively low level of awareness.

In case of devices, awareness about projection devices was comparatively higher than other devices. TWS for epidiascope, overhead projector, slide projector, and film projector was 118, 117, 115 and 111, respectively. TWS for other devices ranged between 50-100.

It was further found that awareness on lecture was maximum (TWS=136) followed by group discussions, field visits and assignments. The TWS for all listed methods was found more than 100. It was also found that awareness about advanced and recent materials, devices and methods viz. DAIRS console, talking typewriter, individualized instructors, team teaching, teaching machines etc was quite poor (TWS less than 50).

Discussion

In India, educational institutions are still lacking in advanced and recent educational technologies and teachers are not given proper training or education in this field, so teachers are not familiar with production or use of materials and equipment. Through informal discussion, it was found that equipment and materials were not maintained properly, so teachers did not take risk to use these. Few of them reported that there was no recognition for teachers who made use of educational technology. Due to these factors awareness about advanced educational technology was found low.

Awareness of easily available and commonly used materials and devices was moderate. These findings are contrary to *Parihar, 1994*, who found that teachers were not aware of videotape, TV, overhead projector, epidiascope and slide projector. Lecture is the most common method; thus awareness about lecture and group discussion was higher. Findings are in support of *Ingle et. al. 1995*.

Implications and Recommendations

In order to explore the potential of educational technology, it would be necessary to enhance the awareness among its intended users. Only then we can think of its use for achieving excellence in educa-

tional scenario. In order to create awareness among teachers, courses must be designed and offered to train and educate them in different areas of educational technology. To promote the utilization of educational technology it would be necessary to provide adequate techno-managerial and financial support to institutions, along with training and education of teachers in this field.

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Table 1. Relative Awareness about different Instructional Materials, Devices and Methods.

Sl. No.	*Component*	*Percentage of teachers*					*Total wtd. score*
		Not heard	*Heard only*	*Know*	*Use/Produce*	*Explain to other*	
Materials							
1.	Overhead Transparency	0.0	0.0	2.5	58.9	38.4	131
2.	Slides	0.0	0.0	17.9	61.5	20.5	118
3.	Posters	0.0	0.0	23.0	51.2	25.6	118
4.	Charts	0.0	0.0	28.2	43.5	28.2	117
5.	Models	0.0	0.0	33.3	46.1	20.5	112
6.	Specimen	0.0	0.0	35.8	33.3	30.7	115
7.	Chalk board	0.0	0.0	7.6	33.3	58.9	137
8.	Graph	0.0	0.0	10.2	38.4	51.2	133
9.	Programmed Instruction	12.8	30.7	46.1	10.2	0.0	60
10.	Video cassette	0.0	7.6	71.7	17.9	2.5	84
11.	Audio cassette	0.0	12.8	61.5	23.0	2.5	84
12.	Tele Text	2.5	69.2	23.0	5.1	0.0	51
13.	Video Text	2.5	66.6	30.7	0.0	0.0	50
14.	Comp. Asstt. Inst.	5.1	53.8	28.2	2.5	10.2	62
15.	ITV	5.1	58.9	35.8	0.0	0.0	51
Devices							
1.	Video Cassette Player	0.0	0.0	15.3	82.0	2.5	112
2.	Close circuit TV	2.5	53.8	38.4	2.5	2.5	58
3.	Audio Cassette Player	2.5	2.5	38.4	53.8	2.5	98
4.	OHP	0.0	0.0	15.3	79.4	5.1	117
5.	Epidiascope	0.0	0.0	17.9	61.5	20.5	118
6.	Slide Projector	0.0	0.0	17.9	69.2	12.8	115
7.	Film Projector	0.0	2.5	28.2	51.2	17.3	111
8.	Still Camera	0.0	0.0	43.5	46.1	10.2	86
9.	Complete output device	0.0	2.5	20.5	71.7	5.1	89

Methods

1.	Lecture	0.0	0.0	0.0	51.2	48.7	136
2.	Group Discussion	0.0	0.0	0.0	58.9	41.0	133
3.	Field Visit	0.0	0.0	2.5	56.4	41.0	132
4.	Demonstrations	0.0	0.0	2.5	64.1	33.3	129
5.	Question Answer	0.0	0.0	2.5	56.4	41.0	132
6.	Assignments	0.0	0.0	2.5	56.4	41.0	132
7.	Slide Show	0.0	2.5	20.5	64.1	12.8	112
8.	Video Show	0.0	5.1	20.5	61.5	12.8	110
9.	Group Project	0.0	2.5	41.0	41.0	15.3	105

Dimensions of Human Personality

Dr. Karan Singh, Member of Parliament (Rajya Sabha), delivered the Convocation Address at the 34th Annual Convocation of the Shivaji University, Kolhapur. He said, "We stand today poised on the threshold of the global society, and we must equip ourselves fully to meet the challenges that lie ahead. We can do this only if the many dimensions of the human personality are fully developed, and surely that is what education is all about." Excerpts

I would pose a series of questions regarding education, directed not only at the new graduates but at all who are in one way or the other involved in the educational process. As the UNESCO Report, of which I was a member, clearly recognizes, the human personality as a multifaceted and many dimensional entity, and education in its broadest sense must take cognisance of all of these dimensions. We stand today poised on the threshold of the global society, and we must equip ourselves fully to meet the challenges that lie ahead. We can do this only if the many dimensions of the human personality are fully developed, and surely that is what education is all about.

My first question is, has your education helped you to develop your physical strength? 'शरीरमाद्यं खलु धर्मसाधनम्' The *shastra* tells us that the basis of all achievement is the human body. We need muscles of iron and nerves of steel, as Swami Vivekananda used to say, to build a new India. It is not an easy task to build a great nation. And for that, has your education taught you proper eating habits? Has it taught you to avoid poisoning your bodies with alcohol, with tobacco or with drugs? Has it taught you to strive towards excellence? We have given up the old tradition of the *Akhadas* and of *Yoga*. I went to China quite recently and in Beijing every morning many thousands of people get up and practice *Tai Chi* which is a sort of slow motion *Yoga*. But I find that our own country is losing the quest for physical excellence. We do not teach our young people how to sit properly, how to breath properly, how to carry themselves properly. I am happy that your University is doing well in sports, but I would like to point out to the young graduates that listening to a cricket commentary is not an alternative for sports. I find a lot of young people now-a-days who call themselves sportsmen are glued to the radio or to the television when all these matches are going on. But that does not help them build their own bodies, except perhaps it might damage their hearing. You have to do something yourselves, wherever you are. You do not need expensive gymnasia to be fit. For *Yoga* you do not even need clothes. You can do it in your own home. But please remember, the body is the basis of achievement. The body is the most superb instrument given to us by the evolutionary process, it is something that should be nurtured and should be tuned to perfection. So that is the first element of our education system, the strength of the body.

The second question is, has your education developed your intellectual capacities, not merely to study what is in your curriculum, but the capacity to learn? Please remember, learning now is a lifelong occupation. The old idea that you first did your education and then you went into life is obsolete. It is now accepted that the learning process begins even before birth. It is now being accepted that even a child in the womb can respond creatively to rhythms and harmonies, and education continues right up to the very last day of one's life on earth. आ नो भद्राः कृतवो यन्तु विश्वतः Let noble thoughts and ideas come to us from every side. We are living in an age of exploding technology and knowledge. Man has reached the moon, the planets and is reaching out to the stars. New dimensions of knowledge are being added everyday to the corpus of human wisdom. Do you have the capacity to constantly learn in all these many fields? There was a time when India was in the forefront of learning, whether it was in Mathematics or Astronomy, Medicine, or Engineering. There was an article in the current issue of *India Today* on the Indus Valley Civilization and the extraordinary architecture and town planning that went into those cities. Why is it that we are lagging behind in new knowledge? Why is it that we have lost the capacity to creatively lead the world intellectual community? We have a long and unbroken tradition of intellectual activity going back to the very dawn of our history. We have to recapture that sense of excitement and adventure. Living as we are in a moment of great transition and turmoil for the human race the second element of our education is the intellectual capacity to learn.

The third question is, has your education helped to develop your emotional maturity? Life today is full of stress — interpersonal, professional, family stress. The pace of life has increased exponentially. We are consistently underestimating the importance of the emotional factor in education. The growth of neurosis, violence and crime in our country is directly

linked to the increasing emotional imbalance among large sections of the people. We are simply unable to cope with the stresses and strains of the new situation. This is an area which is very seldom referred to, far less addressed. The great philosopher Karl Gustav Jung said that in this age the task of humanity is to integrate the shadow. Where is the darkest shadow? Against the brightest light. The light of hyper-consumerism of ultra-promiscuity, of horror and violence that is sweeping across our world casts its malign shadow deep within us. To confront this, emotional maturity is of great importance. I am particularly happy to see so many women graduates here because there is an imbalance in our educational system which has been male-dominated and male-oriented. And yet we see today in almost every University, the feminine aspect is once again rising to take its rightful place in the nation. This is a matter of great satisfaction and as we move onwards into the global society we cannot afford to neglect the deep emotional and psychological aspects that lie behind many of the problems and violence that we see in the world today. And education has, in some way or the other, to address these problems.

Fourthly, has your education developed in you an aesthetic sensibility, a perception of beauty? I am not here talking in elitist terms. I am talking of the beauty that you can see in a flower, or in the starry heavens at night, in the glory of a sunrise, or the sadness of a sunset. Have we tuned our minds to see the beauty around us, or do we simply spend our lives skimming over the surface of consciousness without once stopping to look around? 'सत्यं शिवं सुन्दरम्' Truth, auspiciousness and beauty are the keynotes of Indian civilization. We seem to have lost the capacity to respond creatively, whether it is to music, or to art or to painting, or whether it is the simple joys of every-day life. This aesthetic dimension of our consciousness, again, is something which remains gravely neglected. It is either dismissed as being elitist, or it is overlooked as being of no importance. But in fact one of the special features that distinguishes the human race from other species on this planet is the capacity to be aware of beauty, to create beauty, to respond to beauty. As Sri Aurobindo says in one of his memorable poems, "All music is only the sound of His laughter, all beauty the smile of His passionate bliss". There is a divinity that surrounds us if only we have eyes to see and ears to hear. Maharashtra has a very rich tradition of music, as we were coming in the procession, the great work of Sant Dnyaneshwar being recited. Maharashtra has produced so many saints and singers and so many great scholars. I hope that the universities of Maharashtra will make a special attempt to deepen this aesthetic awareness, so that the students who emerge from here have this capacity throughout their lives to respond to harmony, to respond to beauty and to try in their own lives in however small a way to sweeten the bitter ocean of *'Sansara'*.

The fifth question — I have talked of physical education, of intellectual education, of the capacity to perceive beauty, of the importance of emotional maturity and balance —'समत्वम्'. I come now to the question, has your education taught you socially desirable virtue of compassion and helpfulness, of punctuality and cleanliness, of team-work and co-ordination, of discipline and dedication? Unless we are able to absorb these socially desirable values, we will never become great as a nation. There has been no dearth, Mr. Chancellor, of great individuals in India. We produced the greatest figures in astronomy, in medicine, in mathematics, artists, and in virtually all walks of life. Our weakness has been the lack of social cohesion. The ऋग्वेद gives us two goals of life — आत्मनो मोक्षार्थम् जगहिताय चं'. we must work for the liberation of our own souls but also must pay our debt to society. How is it that countries like Germany and Japan which were totally destroyed in the World War II, have today become the leading nations in their respective continents. Their philosophy is not older than ours, their scholarship is not deeper than ours, their history is not longer than ours. They have the capacity for teamwork and discipline and this is what we need, along with a coherent value system.

अध्यक्ष महोदय, और साथियों; हमारे मूल्यों का वैपरीत्य हो गया है। हमारे मूल्य क्या हैं? हमारा राष्ट्रीय वाक्य है 'सत्यमेव जयते'। मुन्डक उपनिषद का वाक्य है सत्यमेव जयते नानृतम् — truth alone triumphs, not falsehood मगर आज हम क्या देख रहे हैं.. अनृतमेव जयते न तु सत्यम्। संसद भवन के मुख्य द्वार पर एक वाक्य लिखा हुआ है 'अयं निजः परो वेति गणाना लघुचेतसाम्। उदारचरितानां तु वसुधैव कुटुंबकम॥ सारा संसार एक परिवार है। लेकिन आज हम क्या देख रहे हैं — 'कुटुंबएव वसुधा'. परिवार ही विश्व हो गया है।''अहिंसा परमो धर्मः'' पर हमें बड़ा गौरव व गर्व है। हम ऋषि मुनियों की संतान हैं। हम महावीर और बुद्ध के देश के हैं, अशोक और महात्मा गांधी के देश के। आज हम देख रहे हैं घर घर में, गांव गांव में हिंसा भड़क रही है। तो अहिंसा परमो धर्म के बजाए ये हिंसा परमो कर्म हो गया है। ऐसे ही 'बहुजनहिताय। बहुजनसुखाय च। जनता के हित के लिए काम करो, की जगह के हम देख रहे हैं 'स्वजन सुखाय स्वजन हिताय च' अपने ही जनों के लिए कार्य करो। ये वैपरीत्य जो है इससे हमारा देश खतरे में पड़ गया है।

I do not fear any external aggression on India. We are strong enough. After many centuries we have emerged as a sovereign republic, we can safeguard our sovereignty from external aggression.

But can we safeguard it from internal erosion? Can we safeguard it when our moral values are deteriorating around us? And here I am not blaming any particular class of our citizens. It is fashionable now only to blame the politicians, and certainly the politicians have much to answer for. But this is a much deeper malaise that has eaten like an acid into the heart and roots of our society. For twenty years now some of us have been warning the nation that if corruption is allowed to continue like this, it will not only become a danger to our economy but a danger to our polity also. And today we have reached the stage when it appears that India, which Swami Vivekananda said would be the *Guru* of nations, and Sri Aurobindo said, "India is rising not when she rises to trample upon the weak, but to shed the light on the eternal *Dharma* that she has nurtured in her breast" is herself groping in the darkness. How can we shed any light to anybody else if in our own country we are like the blind being led by the blind.

And this brings me to my final point — Has your education developed in you your spiritual centre? In the ultimate analysis, human life itself is a quest towards spiritual maturity and realization. As Francis Thompson in one of his great poems says,

"Not where the wheeling systems darken
And our benumbed conceiving soars,
The drift of pinions, would we hearken,
Beats at our own clay-shuttered doors,
The angels keep their ancient places,
Turn but a stone and start a wing
Tis ye, tis your estranged faces
That miss the many splendoured thing".

The many splendoured light of the *"Atman"*, "The light that lighteth everyman that cometh into the world' as the Bible says, The *'ruhani noor'* of the *Sufis*, the *'Ek onkar'* of the *Gurus*, the light of the *Atman*.

वेदाहमेतं पुरुषं महान्तं आदित्यवर्ण तमसः परस्तात्।

Greater than the light of a thousand suns rising together. Have you discovered that spiritual centre within you around which you will have to begin your quest? Always remember, whatever else you may do in life, whatever your profession may be, whatever your work and wherever your work may take you, the quest towards inner growth should always continue. And that surely is the final and ultimate dimension of the human personality. And therefore, friends, I would like to know whether these six dimensions are being addressed by our university system. We are very distinguished and experienced educationists sitting here on the dias and in the audience, I would urge you to ponder upon these points, and to try and see what needs to be done to develop a holistic and integrated education that would take cognizance of these various elements of the human personality.

Friends, today is an exciting time to be alive. We are a privileged generation. We are the first generation to have seen that photograph of Planet Earth taken from outer space. No generation before us, none of the greatest people before us, have seen that because only now did we have the technology to throw a human being outside the grip of gravity and take the photograph. That shows our earth as it really is, a tiny streak of light and life against unending vastness of outer space, so beautiful and yet so fragile. The earth, भवानी वसुन्धरा, has nurtured us from the slime of primeval ocean, from unicellular micro-organisms to where we are today. And the future beckons to us. I would urge the young graduates today not to give way to negativity or cynicism. We cannot afford the luxury of negativity.

We are facing the greatest challenge humanity has ever faced in its long history, the transition to the global society. And India must spear-head this great transition. Because, of all the civilizations of the world, India alone has the philosophy, has the pluralistic approach and the technological background to be able to do this. But we cannot do it if we are constantly bemoaning our fate. We cannot do it if we are building walls of hatred within our own societies, whether they are based on religion, on caste, or on political parties or on any other premise. We have got to build a united and an integrated nation. India has a historical destiny to fulfil. And that destiny has to be fulfilled by young people like you who today have received your degrees and prizes from your distinguished Chancellor and Vice-Chancellor.

While, therefore, congratulating the Shivaji University on its considerable achievements, let me end with great exhortation from the Kathopanishad which I would like to leave in the minds and hearts of the young graduates. It exhorts us to awake and arise and move onwards across the razor-edged path towards our goal. There are no soft options left any longer, either for individual salvation or collective redemption. We have to move along a difficult and dangerous path, but that is the only path that will take us to our goal of a higher consciousness, a new society, a new India and a new world. This is an exhortation which, I hope, will ring in your ears wherever you go.

उत्तिष्ठत जाग्रत प्राप्य वरान्निबोधत्।
क्षुरस्य धारा निषिता दुरत्यया।
दुर्गं पथस्तत्कवयो वदन्ति॥

SAARC Varsities Association

About 300 universities of the SAARC (South Asian Association for Regional Co-operation) nations have formed the Association of SAARC Universities (ASU). A committee comprising five vice-chancellors and an equal number of representatives from the University Grants Commissions (UGCs) of India, Pakistan, Sri Lanka, Bangladesh and Nepal is reported to have been constituted to work out the modalities for the ASU. This was revealed by Prof. Dayananda Somasundara, vice-chancellor of the Sabaragamuwa University of Sri Lanka and a member of the committee in Gulbarga recently.

Prof. Somasundara, who was in Gulbarga recently along with a team of students from his varsity to participate in the first ever SAARC youth festival, said the ASU had been formed with the main idea of co-ordinating with various universities in the region in regard to student and faculty exchange programmes.

The ASU aimed at providing an opportunity to students and teachers of SAARC countries to visit other universities in the region and know the work taken up there and enrich their knowledge, he observed.

There are various SAARC bodies that co-ordinate with the member countries in regard to sports, economic and political activities. There was no organisation to address the educational issues of the areas. With the creation of the ASU, the void had been filled, he said.

Prof. Somasundara said the ASU had been formed on the same lines as the Association of Commonwealth Universities (ACU). "Countries like England and Australia usually dominate the ACU. Now with the formation of ASU, SAARC nations will have a say in matters," he remarked.

He said the Constitution for the ASU had already been formed and approved by the Committee. The draft constitution would now be placed before the meeting of the ASU Council, which comprised vice-chancellors of all the varsities of the region, for ratification, he added. The decision to form ASU was taken at a meeting of vice-chancellors' held at Devi Ahilya University at Indore recently.

Prof. Chhaparwal, vice-chancellor of the Devi Ahilya University had taken the lead in this regard, Prof. Somasundara said. The vice-chancellors of 240 varsities from India, about 30 from Pakistan, 20 from Bangladesh, 12 from Sri Lanka and the lone varsity from Nepal will be members of the ASU Council. There are no universities in the other two SAARC nations of Maldives and Bhutan.

Referring to the SAARC youth festival, Prof. Somasundara said a platform had now been created for the students of member nations to exhibit their talents on an international platform. "The Gulbarga University has done a great work by organising the first such event. This should become an annual event," he added.

Managing Higher Education

Dearth of infrastructure, lack of commitment among students and aversion to change in curriculum had deepened the crisis in the higher education sector, said Prof. V. Venkaiah, Rector of Dr. B.R. Ambedkar Open University. He was speaking at the State-level seminar, 'Management of higher education', organised jointly by the Sardar Patel College and Association of Principals of Private Affiliated Colleges under the UGC (Southern Regional Office) Programme in Hyderabad recently. He said that the number of people seeking higher education had increased since independence.

The number of universities went up from 20 in 1947 to 240 in 1998, while the student strength in colleges and universities increased from 1.5 lakh to 65 lakh.

However, higher education had been facing an identity crisis with the quality of teaching remaining poor and the students showing little commitment. Observing that privatisation of higher education had begun with the setting up of private colleges, Prof. Venkaiah said, however, universities had not come up in the private sector. Government colleges, too, should have surplus funds to remain in the race and continue to impart quality education, he said. Commissioner of Higher Education Mr. D.R. Garg suggested that a new mechanism should be evolved to bring in young and dynamic lecturers as Principals in the place of the existing practice of appointing Principals by virtue of seniority.

Though the output from government-run professional colleges had increased, quality of education was very low. "Government colleges provide low standards of education despite having more qualified and better paid faculty

than private colleges. Something is wrong somewhere and we have to set it right," he said.

Workshop on Nuclear Magnetic Resonance

The UP Governor, Mr. Suraj Bhan, inaugurated a workshop on Establishment of Biomedical Nuclear Magnetic Resonance (NMR) Research and Training Centre in the Sanjay Gandhi Post-Graduate Institute of Medical Sciences (SGPGIMS) in Lucknow recently.

The Governor said that one of the greatest challenges faced today in scientific research was the cost involved because India was a developing country.

However, he added, "we have to keep abreast of the latest trends and initiate research work within our reach."

The physical infrastructure had expanded tremendously in the medical field, Mr. Suraj Bhan said but there was a dearth of doctors and trained and specialised workers. He pointed out that two related factors of accessibility and affordability must be kept in mind to ensure that such facilities reach a greater number of beneficiaries.

The idea of the workshop was to explore the possibility of establishing a centre exclusively devoted to biomedical applications so that the country could keep up with the rest of the world in the frontline research in this area.

The workshop consisted of lectures by eminent scientists from all over the country such as TIFR, Mumbai, IISc, Bangalore, Institute of Nuclear Medicine and Allied Sciences, Delhi, AIIMS, SGPGIMS, IIT, Kanpur CDRI and Lucknow University. It was followed by a round-table discussion by the various scientists.

A unique feature of the workshop was to explore the possibility of an interaction between the medical, physical and social scientists.

Besides, the prominent scientists such as the former Director, CDRI, Dr Nityanand, and the nation's leading neuro surgeon, Professor P.N. Tandon, participated in the deliberations.

During the past decade magnetic resonance has been extensively used for diagnostic purposes in medical sciences. Among the latest developments, an important aspect is the discovery of functional imaging whereby the function of the brain can be actual, physiological and social too. That is why the emphasis was also on interface between the natural and social sciences.

The functions of the existing national facilities in the country and their objectives were the topics discussed by the experts hailing from institutions such as TIFR, Mumbai, INMAS, AIIMS etc.

The idea of the present workshop was not to duplicate what had already been done at the national centres but to discuss those aspects which were not being covered by other existing centres so that this formed a complementary and unique centre for such research in the country.

Greek Studies at JNU

The Government of Greece is reported to have agreed to institute a Chair in Classical Greek Studies in the School of Language, Literature and Culture Studies at Jawaharlal Nehru University (JNU).

This is the first chair to be endowed by the Greek Government in Asia and fourth in the world after Harvard, Macgill and Missouri Universities.

The JNU is in the process of setting up a major Indo-European Studies programme involving classical studies built around Greek, Latin, Hebrew, Sanskrit, Prakrit, Pali, Persian and Arabic. A beginning has been made with Greece.

Mr. Yennis-Alexis Zepos, Ambassador of Greece at a meeting with the Vice-Chancellor and the University officials, said that for the Greek Government and people this should mark the beginning of a close intellectual and cultural relationship between India and Greece.

Prof. Asis Datta, JNU Vice-Chancellor, said that it was a matter of great honour for the JNU that it had become the first university in Asia for endowment of Chair in Classical Greek studies.

Prof. Rahmatullah Khan, Rector, JNU, said this was an affirmation and a renewal of the age-old cultural ties between the two countries.

Under this agreement, Greece has decided to institute an endowment of $ 100,000 and the first Greek scholar is likely to be in JNU in the session beginning July, 1999, to organise a teaching and research programme of studies involving Greek language, classical as well as modern, Greek literature, philosophy and culture.

Environment : Concerns & Strategies

Singareni Collieries Women's Degree College, Kothagudem, organised a Seminar on Environment : Concerns and Strategies. The seminar was inaugurated by Prof. Vidyavathi, Vice-Chancellor of Kakatiya University, while Prof. A.R. Reddy, School of Plant Sciences, University of Hyderabad presided.

Prof. A.R. Reddy delivered the keynote address on "Genetic Engineering of Crops for Environmental Stress Tolerance."

The seminar was conducted in five sessions and the topics discussed included (i) Environment — Biotechnology and Agriculture; (ii) Environment Management Through Micro-Organisms; (iii) Environment Impact Assessment — The Need; (iv) Environment Pollution and Impact Assessment; (v) Forests and Ecology; (vi) Greening of Waste Lands; (vii) Environment — Women, Health and Population; (viii) Environment Pollution and Monitoring.

24 papers were presented and 60 participants from University of Hyderabad, Osmania University, Kakatiya University, Degree colleges from Khammam and Warangal, local colleges and industries in addition to Singareni Collieries Co. employees participated and deliberated various themes related to Environment.

Seminar on Human Rights

Mr. Justice V.S. Malimath, Member, National Human Rights Commission (NHRC), said that the existing set-up of the country was inadequate to protect human rights. There was an immediate need to develop a preventive strategy for the protection of human rights. He was delivering the keynote address at the inauguration of a two-day national seminar on "Human Rights Education" held in Jammu recently. He said the worsening law and order situation presented the biggest challenge to human rights. Sponsored by the University Grants Commission (UGC) the seminar was organised by the Faculty of Law, University of Jammu.

Tracing the history of human rights in India, Justice Malimath said some attention was given to the issue in 1982 when a committee was formed under the supervision of Justice Sikri for the development, awareness and protection of human rights. To promote human rights culture had been the sole aim of human rights education, he said, adding that with the declaration of universal human rights by the United Nations, this aspect was attaining more significance.

The NHRC member also said that India had contributed to the protection and spreading of awareness of human rights. The inclusion of the Directive Principles of State Policy in our Constitution was a guiding force for acceptance of human rights, he added.

Speaking on the occasion, Prof. R.R. Sharma, Vice-Chancellor, Jammu University, said the issue of human rights education was assuming significance in the present situation. There was need for providing proper education about human rights at the grassroots level.

National Seminar on NWF

The three-day national seminar on "North-West Frontier of India" which was organised by the Faculty of History, University of Jammu in collaboration with the Centre for History and Culture of Jammu and Ladakh recently concluded in Jammu.

A number of important papers pertaining to the historical and political aspects of the northwest frontier of India were presented by eminent academicians from various universities.

Prof. Hari Om, Head of Department, Jammu University and member ICHR, while presenting his paper favoured a plebiscite under 1948-49 UN resolutions for solution of the Kashmir issue. He said that holding a plebiscite in Jammu and Kashmir would not only silence anti-India lobbies in the USA and elsewhere, but also prepare the ground for the unification of PoK with the Indian part of Jammu and Kashmir.

Renowned historian Prof. Sukh Dev Singh Charak said the North-West Frontier occupied an important place in Indian history.

Prof. G.S. Devra of Kota Open University, in his paper, said that the route of invaders to India before Babur was different and passed through the towns of Central Asia and Multan.

Other academicians who presented their papers included Prof. A.R. Khan of Himachal Pradesh University, Prof. Anjali Chatterjee, Delhi University, Prof. Yoginder Chawla and Prof. G.D. Gulati, both from Delhi University, Dr. Jigar Mohammad, Dr. Amita Billawria, Dr. Sham Narayan Lal, Prof. Rekha Choudhary, Dr. Poonam Choudhary, all from Jammu University besides Ms. Purnima Kak and Ms Kiran Saproo, research scholars in the history department of Jammu University.

SAARC Stand on Science

India and the other South Asian Association for Regional Cooperation (SAARC) countries propose to adopt a common approach on Science at the World Conference to be held in Budapest, Hungary, in June end. An agreement to this effect was reached at a meeting of the SAARC technical committee on science and technology held in New Delhi recently. The meet, attended by technical experts from the seven member-countries, agreed to project a common stand on the agenda and the documents to be adopted at the

conference being organised by UNESCO.

The conference is expected to discuss a wide spectrum of issues such as priorities for science and its relevance to the needs and expectations of society in the next century.

The committee also agreed to a proposal for setting up a SAARC standing committee on bio-technology to further synergise the efforts of the member-countries towards conservation and sustainable development of the region's bioresources. It was decided to place a detailed consensus report in this regard before the meeting of the SAARC Council of Ministers, scheduled to be held shortly.

In addition, the meet decided on the development and popularisation of common guidelines with regard to the protection of intellectual property rights, biodiversity and traditional knowledge in the SAARC region.

Besides, it identified several areas of possible collaboration among the member-countries in science and technology. The areas include plant tissue culture, preparation of an inventory of medicinal and aromatic plants and development of vaccines and diagnostics for humans and animals. It also decided to organise a workshop on application of low-level lasers for the treatment of TB and wound healing and another on automation in the water sector.

Refresher Course on Gandhian Thought

The Department of Gandhian Studies, Gujarat Vidyapith, in collaboration with Shri Jamnalal Bajaj Ahimsa Shodh Sansthan, recently organised a U.G.C. sponsored Refresher Course. 25 Lecturers from Universities of Saurashtra, Poona, Pondicherry, Manipur, Chitrakut, Madurai, Gandhigram participated in it.

The theme of the course was "Application of Gandhian Thought for a global culture of Peace and Non-violence" (for emergence of New Society).

The topics discussed included (i) Gandhian Perspectives of Peace and Non-violence; (ii) Global Culture of Peace, UNESCO's Perception; (iii) Gandhiji's Social Philosophy; (iv) Gandhiji's Educational Thoughts; (v) Gandhian reflection in Amratya Sen's Thoughts; (vi) Relevance of Gandhian Concept of Decentralisation; (vii) Essentials of Gandhian Philosophy, Principles and Implications; (viii) Khadi and Village Industry; (ix) Gandhian Perception of Gender Justice; (x) Satyagarh as a means of Conflict Resolution; (xi) Gandhiji's Educational Thoughts; (xii) Vinoba's Bhoodan Movement; (xiii) Gandhiji's Religious Thoughts; (xiv) Shanti-Sena; (xv) Alleviation of Poverty : Gandhian Perspectives; (xvi) Sanitation and Hygiene; and (xvii) International Movement of Peace & Non-violence.

News from Agricultural Universities

Haryana Agricultural Officers Workshop

A 3-day Agricultural Officers Workshop was recently organised at the CCS Haryana Agricultural University in which over 300 scientists and extension officers of the state department of agriculture participated.

Inaugurating the workshop, Prof. J.B. Chowdhury, Vice-Chancellor, said that sustainable agriculture in 21st century would be based on the appropriate use of biotechnology, information technology and eco-technology. He exhorted the researchers and extension officials to take stock of the problems of the peasantry and to strive hard in finding their viable solutions in accordance with the changing requirement and agro-climatic situation. Expressing concern over the gravity of the problems arising due to water-logging and soil salinization, diseases and pests infestation, he said that the agricultural production was affected adversely. He appealed the participants to strive hard to enhance grain production by strengthening input supply of high yielding seeds, balanced use of fertilizers, integrated pest management and with more emphasis on eco-friendly approach as also strengthening of agricultural research and development system.

The Commissioner and Secretary Agriculture, Shri H.C. Disodia, in his presidential address, complimented the scientists, extension workers and the farmers who strived hard to transform a deficit state not only into a self-sufficient but also into a principal contributor to the central pool. He quoted detailed statistics to drive home the point that the cropping pattern in the state had undergone a sea change since creation of the state in 1966. The low productive, less remunerative crops like bajra, maize and jowar were replaced by high productive and more remunerative crops like paddy and cotton in kharif season and crops like gram and barley were replaced by wheat and mustard in rabi. Thus the achievements of the state in terms of total production of foodgrains were highly impres-

sive. But at the same time he pointed towards the fact that productivity of major crops had stagnated which even declined in certain areas. The stagnation had occurred despite the increase in inputs use which was indicative of the fact that use efficiency of inputs and particularly that of chemical fertilizers had decreased, he opined. The possible ailments inflicting agriculture in the state were waterlogging and salinity, deterioration in soil health and increased infestation of disease and pests. The Government of Haryana had drawn up an ambitious master plan at a total cost of around Rs. 2300 crores to tackle the menace of water logging and soil salinity. Shri Disodia emphasised that the stagnation barriers had to be broken and productivity of different crops increased as there existed no scope for horizontal expansion in area in food production because 96% of the total cultivable area was already under plough.

Director Agriculture, Smt. Shakuntala Jakhu, in her concluding remarks, stressed the need of dissemination of the technology as the technology generated in the laboratories was of no avail unless it was taken to the land by the extension workers. She assured that all out efforts would be made to make the necessary inputs available to the farmers in time and to support some of the research activities undertaken by the university in critical areas. The successful demonstration of zero tillage seed-cum-fertilizer drill for sowing of wheat and mechanical transplanter in paddy had given encouraging results. Likewise, the newly identified herbicides by the university for the control of resistant population of *Phalaris minor* had proved to be very effective. Such innovative technologies sustained hope for the future and if the efforts were jointly made, the barrier of stagnation in productivity could be broken, she stressed.

Dr. B.L. Jalali, Director of Research, while presenting the research highlights of the University, said that the university had recently recommended six new high yielding varieties/hybrids of various crops for release in case of rice, sugarcane, fababean, chick-pea and maize. A much needed hybrid in American cotton HHH-223 had been identified for farmers field testing.

Earlier, the Director of Extension Education, Dr. Rakesh Yamdagni in his welcome address, highlighted the emerging problems in the field of agriculture and urged the fellow scientists to conduct appropriate researches in tackling these problems. He also urged that indigenous practices of the farmers should also be kept in view for finalising the technology packages of sustainable agriculture.

TNAU Technology Information Centre

The Indian Council of Agricultural Research (ICAR) is reported to have sanctioned Rs. 22 lakhs to the Tamil Nadu Agriculture University (TNAU) for establishing an Agriculture Technology Information Centre on the university campus in Coimbatore. This was revealed by Dr. A. Abdul Kareem, Vice-Chancellor, TNAU, who said the centre would provide the necessary information on any agriculture-related subject to farmers. It would have computers, cataloguing information on agriculture-related subjects, problems concerning crops etc.

The TNAU had embarked on establishing an Agriculture Research Information System (ARIS), connecting 10 colleges and six research stations, with financial assistance from the ICAR. Under the project, a computer network would be established among the institutions with Internet and E-mail facilities.

The Pechiparai Horticulture Research Station would discharge the additional function of a KVK for the Kanyakumari district and the ICAR had sanctioned Rs. 21 lakhs for the purpose.

Dr. Kareem said that the land acquisition process had begun for establishing a cotton research station at Perambalur. The university also planned to undertake a State-wide micro nutrient deficiency investigation in agricultural land. It would undertake soil mapping of the agricultural land in various parts of the State to evaluate the extent of the deficiency of micro-nutrients.

Among the new research projects planned to be taken up by the TNAU were an evaluation of the viruses in banana crop in the State. A new research project would be taken up in Madurai on post-harvest preservation and value addition of "less popular" fruit varieties, such as wood apple and amla.

The ICAR had sanctioned Rs. 19 lakhs to the Agricultural Engineering College at Kumulur in Tiruchi for undertaking a three-year research project on controlling pests in foodgrain storage under "controlled conditions."

The ICAR had asked the TNAU, under its extension programme, to produce a video cassette documenting the developments and achievements made in the field of agriculture since Independence. A sum of Rs. 2.5 lakhs had been sanctioned for the purpose.

News from UGC

Countrywide Classroom Programme

Between 1st and 7th April, 1999 the following schedule of telecast on higher education through INSAT-1D under the auspices of the University Grants Commission will be observed. The programmes are telecast on the Doordarshan's National Network from 9.30 to 10.00 a.m. every day except on Saturdays & Sundays. These programmes are also telecast on Doordarshan's National Network from 6.00 to 6.30 a.m. two days a week i.e. on Saturdays and Sundays. On DD2 International Programme will be shown at 11.00 to 12.00 hours on Saturdays only.

Hindi Programmes are being telecast on Mondays to Fridays from 6.00 to 6.30 a.m.

1.4.99

"The Human Mind-1 : Search for Mind"
"Question Time-91"
"Nadur Hanz — An Aquatic Tribe"

2.4.99

"Aid & Development : Beg, Borrow, Steal"
"Bookfare : Children's Literature"
"For They Stayed On"

3.4.99

"International Programmes"

4.4.99

"Special Effects in Photography"

5.4.99

"The Search for Primes"
"Integral Pedagogy Process Overview"
"Young Scientist"

6.4.99

"Glimpses of India : Treasure of Orissa"
"Rainout Shelter"

7.4.99

"Food Security"
"We Too Are Culprits"
"Food : The Body Fuel"

Hindi Telecast

प्रात: 6.00 से 6.30 बजे तक

2.4.99

"पंचायती राज : विकेन्द्रीकरण के नवीन आयाम"

3.4.99

"श्याम सखा सूरदास : 1 जीवन वृत एवं भक्ति दर्शन"

5.4.99

"हिन्दी का प्रथम शोध निबन्ध-2"

6.4.99

"खनिजों के भौतिक गुणधर्म"

7.4.99

"सफेद दाग : एक त्वचा रोग"

News from Abroad

Mexican Govt Scholarships

The Mexican Government has offered Graduate Scholarships to foreigners for the year 2000. The characteristics of scholarships are : Specialities, Artistic Stays, Masters, Translation of works from Mexican authors, Ph.D., Stays for professional practices, Post Doctoral Stays, High Level Conferences, Courses of spanish language and mexican culture for teachers and students, and Visiting Professors.

The priority areas are established by the relation between the studies requested by scholarship candidates and the corresponding development existing in their countries of origin. Scholarships are awarded in those areas specified by this Call for Applications. No scholarships are offered for odontology, plastic surgery, marketing, business administration, accounting and publicity. In the field of medicine, scholarships are exclusively awarded in the areas previously established by the programme Ministry of Foreign Affairs-Ministry of Health.

The criterion of selection is (i) academic excellency of candidate and of the mexican recipient institution; (ii) importance of the studies as well as their direct relation with the development of the candidate's country; (iii) ties between the academic and professional background; (iv) quality of studies to be performed in Mexico; and (v) reinstalment of candidate in his country's labour market at the end of the scholarship.

The general requirements are : to comply with all formalities required for Scholarships offered by the Ministry of Foreign Affairs of Mexico, (SRE); to obtain academic acceptance from the recipient Mexican Institution; to present a bachelor's degree or a masters degree, according to level of studies to be pursued by scholarship candidate; to present grades with a min. average of 8 in a scale of 1 to 10, or its equivalent; to return to country of origin at the end of scholarship.

The closing date for receipt of applications is 31 May, 1999.

Further details may be obtained from : Reforma, 12th Floor, Col. Cuauhtemoc, Mexico City, Tel. 2413402.

BOOK REVIEW

Useful Reference Source

Nirmala Muralidhar*

Tandon R.K. and Sudarshan K.N. Directory and Handbook of Children. New Delhi, A.P. H. Publishing Corporation, 1998. Pp. 565. Rs. 1000/-.

Child welfare covers the entire spectrum of services that lead to the well being of the child. The book under review deals with problems like child labour, child survival, child and the law, child prostitution etc, which are critical issues in our country. The world recognises the importance of child care services and the outcome of such thinking is the proclamation of children's rights and their implementation at the national and international level.

The book has seventeen chapters in all. The first chapter highlights the idea that the children have special needs. The convention on the Rights of the Child has produced a change in the world's attitude towards children. Role of families, societies and governments in fulfilling the rights of children in a non-discriminatory manner has been discussed vividly.

Child workers are children without childhood. Child labour has always been an area of concern. Any efforts to deal with the issue of child labour has to address the question of education. Schooling is the single most important measure of preventing child labour. The authors have emphasised the need to examine legislation governing compulsory education in Chapter 2. Behind the children who serve in carpet making, match stick making, slate and silk industries lies a story of neglect, poverty, broken families and social indifference. The chapter on Population Statistics of Children provides important data on child population in various states and also includes projection of child population from 1986-2001. Population distribution on the basis of age, sex and residence have also been included. The availability of such data has special significance for policy makers and for programme formulation.

The subsequent chapters deal with child survival, statistics on child nutrition and child education and literacy. Chapter 4 addresses itself to the question of childhood malnutrition, responsibility of the government to provide assistance to community groups working on the local malnutrition problem. The authors stress the need for right to adequate nutrition in the law, and assuming the implementation of the same. Statistics on child nutrition include : Goals — for health and family welfare programmes by 2000 A.D., State-wise average consumption of nutrients, Consumption of foods by preschool children, nutrition during pregnancy and lactation, Percentage distribution of living children by breast feeding status.

In the chapter on Child Education and Literacy, the authors have provided data on literacy rates in India and Growth of recognised educational institutions, Progress of enrolment at primary and middle level by sex in India, Dropout rates

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at primary and middle stage by sex in states/union territories.

The maltreatment of children has been witnessed throughout history. There is the progression from children as property to children as individuals with personal rights. The chapter on Child Abuse examines the behaviour problems shown by maltreated children. There is a relationship between maltreatment and delinquency. More delinquent than non-delinquent children report higher rates of abuse and neglect.

Chapter 8 focuses on child health and family welfare services. Statistics on birth rate, death rate, IMR, Maternal mortality, deliveries conducted by trained dais, immunisation, children availing referral services has been given in detail.

Views on parenting have changed greatly over the years. The authors discuss the various theoretical models on child caring, as given by Locke, Freud, Sears, Baumrind etc. The Chapter also provides insight into the differential roles of father and mother in child rearing and also the impact of culture on the well being of a child.

The Chapter on Child Development and Welfare Services provides data on programmes like ICDS projects, Nutrition Feeding Programme in Balwadis, Implementation of programme of creches for children of working and ailing mothers by Central Social Welfare Board. It is a comprehensive compilation of welfare services and will prove to be useful to individuals in the field of child welfare.

The authors discuss the role of a well trained health worker in creating health awareness in the community. The health worker can provide information on all areas related to maternal and child health. They also stress upon the need to build a shield of basic protection around the early years for all children in chapter 11.

Chapter 12 focuses on the state of the world's children. Child prostitution has been discussed elaborately in chapter 13. Personal interviews with child prostitutes reveal that most of the girls belonged to poor families, were illiterate, lived in crowded and unhygenic conditions. The authors also discuss rehabilitation and elimination of child prostitution.

The united convention on the rights of the child, role of the state in protecting children's rights, major areas of international action, monitoring and implementation of children's rights are issues highlighted in the chapter on Child and the Law. The international declarations, conventions, laws along with special issues concerning children are discussed in detail.

An elaborate list of organisations working for children and women, child welfare agencies and services, voluntary child welfare agencies and services in India has been provided in chapters 15, 16 & 17 respectively. This will be useful for teachers, social workers and organisations working with women and children.

The wide range of areas relating to child welfare covered in this book will be useful reference material for students. The book is informative, provides insight into various aspects of child welfare and child development. The book includes information which gives direction to and protection of children living all over the world.

COMMUNICATION

Fake Universities

I refer to the news item "Fake Universities" published in the "News from UGC" Column of *University News*, February 15. It seems that issuing a press release around June, listing "fake" universities and warning students against seeking admission to them, have become an annual ritual. It is strange that the names of a number of these fake institutions appear in the UGC Press release year after year. We have a right to know what action had been taken by the UGC against them. Had any one of them been dragged to the court of law for violating Sections 22 and 23 of the UGC Act, 1956? The provision in Section 24 of the Act for imposing a panalty of a paltry sum of rupees one thousand for such violations, is not deterrant enough to stop the menace. Some drastic measures are needed.

Incidentally, I note that the name Bhartiya Shiksha Parishad, Uttar Pradesh, which used to be included in the earlier lists, does not appear in the list published in the *University News*. Till the end of the last year, its advertisements were published in several national newspapers. From recent advertisements, it appears that the institution had changed its name to Akhil Bhartiya Shikshak Sansthan, New Delhi. The contents of the advertisements remain unchanged except that for getting a prospectus instead of sending the amount to Indian Institute of Professional Studies, 2/268 Vishwas Khard, Gomti Nagar, Lucknow-10, the contract address is National College of Correspondence, LIG 186, Santa Vihar, New Delhi-110 044.

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THESES OF THE MONTH

A list of doctoral theses accepted by Indian Universities (January-February 1999)

SOCIAL SCIENCES

Anthropology

1. Kalaria, Sunita Ramniklal. **A study of food, nutrition and health of women and children of Konkha Tribe.** (Dr Rasbihari Lal), Department of Social Anthropology, Gujarat Vidyapith, Ahmedabad.

2. Vyas, Pinakin Hiralal. **Social and occupational mobility among a Postoral community, the Bharwads.** (Dr Rasbihari Lal), Department of Social Anthropology, Gujarat Vidyapith, Ahmedabad.

Commerce

1. Chary, D Thiruvengala. **Strategic planning in selected public sector undertakings: A comparative analysis.** (Dr M Subramanya Sharma), Department of Commerce, Kakatiya University, Warangal.

2. Dave, Hitesh M. **Export performance and potential: A case study of Amroli District.** (Dr N M Khandelwal), Department of Commerce, Saurashtra University, Rajkot.

3. Dhar, Meenu. **Manpower planning in Telecommunication Department in Jammu Province.** (Dr Santosh Gupta), Department of Commerce, University of Jammu, Jammu.

4. Goswami, Chandana. **Growth of MIS in oil companies of Assam: An evaluation in comparison with the public sector companies of India.** (Dr U R Dhar), Department of Commerce, Gauhati University, Guwahati.

5. Gupta, Arindam. **Accounting based and market determined risk measures: A study in their interrelation with reference to selected Indian companies.** (Prof Amit Kumar Mallik), Department of Commerce, University of Burdwan, Burdwan.

6. Gupta, Arti. **Management of finances of higher education system: A comparative study of centre and state universities.** (Dr S P Gupta and Dr Desh Bandhu), Department of Commerce, University of Jammu, Jammu.

7. Kashive, Prakash Chandra. **MP mein krishi per adharit pramukh udyogon kee arthik vivechana: Ek adhyayan.** (Dr C M Shukla), Department of Commerce, Rani Durgavati Vishwavidyalaya, Jabalpur.

8. Mehta, Varsha. **State Bank of Indore dwara pradatt krishi vitt kee prabhavsheelata ka mulyankan: Indore Jile ke vishesh sandarbh mein.** (Dr Mangal Yashwant Mishra), Department of Commerce, Devi Ahilya Vishwavidyalaya, Indore.

9. Pandit, Princy Priya Bharti. **Human resource development in Life Insurance Corporation of India: A case study of Northern Zone.** (Dr Santosh Gupta), Department of Commerce, University of Jammu, Jammu.

10. Sinha, Keshab Chandra. **Problems and prospects of handloom cooperatives: A study with reference to Hooghly District of West Bengal.** (Dr Jyoti Bikash Sarkar), Department of Commerce, University of Burdwan, Burdwan.

Economics

1. Dimri, Anupma. **Economic analysis of contribution of women to dairy and crop farming systems in Tarai Region of Nainital District, Uttar Pradesh.** Department of Dairy Economics, National Dairy Research Institute, Karnal.

2. Dutta, Bijit Kumar. **A study on theories of sharecropping with evidence from Karimganj District of Assam.** (Prof M Lalwani and Dr E Thomas), Department of Economics, North Eastern Hill University, Shillong.

3. Jha, Prabhat Kumar. **A comprehensive study on crop and dairy farming practices in North Bihar.** Department of Dairy Extension Education, National Dairy Research Institute, Karnal.

4. Jirli, Basavaprabhu. **A study on adulteration in milk: Feedback and constraints in detection techniques.** (Dr Ram Kumar), Department of Dairy Extension Education, National Dairy Research Institute, Karnal.

5. Kehar Singh. **Information dynamics in transfer of dairy production technologies in Kangra District of Himachal Pradesh.** Department of Dairy Extension Education, National Dairy Research Institute, Karnal.

6. Khem Chand. **Economic analysis of commercial dairy herds in Bikaner, Rajasthan.** Department of Dairy Economics, National Dairy Research Institute, Karnal.

7. Mritunjay Kumar. **Determinants of rural energy consumption in Madhya Pradesh.** (Dr A D N Bajpai), Department of Economics, Rani Durgavati Vishwavidyalaya, Jabalpur.

8. Mukhopadhyay, Debkumar. **Indo-Soviet trade relation: An assessment in the context of disintegration of the Soviet Union.** (Prof M Dasgupta), Department of Economics, University of North Bengal, Raja Rammohunpur, Distt Darjeeling.

9. Mukhopadhyay, Partha. **The political economy of Indian banking in the post-nationalisation period, 1969-1991.** (Dr Arup Maharatna), Department of Economics, University of Burdwan, Burdwan.

10. Nwaegwugwu, Isac C. **Analytics of revenue devolution and fiscal imbalances in Nigeria.** Department of Economics, Maharaja Sayajirao University of Baroda, Vadodara.

11. Pandey, Dinesh Chandra. **Problems and policies in employment expansion: A case study of Damodar Valley Corporation.** (Dr Madan Kumar Prasad), Department of Economics, Vinoba Bhave University, Hazaribag.

12. Panwar, Pradeep. **Jhabua Jile ke adivasi krishi shramikon kee rojgar tatha aya sanrachana: Ek adhyayan.** (Dr S S Panwar), Department of Economics, Devi Ahilya Vishwavidyalaya, Indore.

13. Rajam, V. **Export performance of selected engineering goods industries in India from 1975-76 to 1990-91.** (Dr K Chandrasekhar), Department of Economics, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.

14. Ram Singh. **An analysis of emerging issues of dairy extension system in India.** (Dr Ram Chand), Department of Dairy Extension Education, National Dairy Research Institute, Karnal.

15. Ramathal, K M. **Assessment of economic efficiency: An application to paddy cultivation in Tamil Nadu.** (Dr G Ramathilagam), Department of Economics, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.

16. Sah, Uma. **An analysis of dairy animal breeding and management practices in hill zone of UP: A gender perspective.** (Dr R M Fulzele), Department of Dairy Extension Education, National Dairy Research Institute, Karnal.

17. Seth, Bela. **Urban female work participation: A case study of Burdwan District.** (Dr Kalyanbrata Bhattacharyya), Department of Economics, University of Burdwan, Burdwan.

18. Shalander Kumar. **Economic analysis of farming systems in Mathura District of Uttar Pradesh.** Department of Dairy Economics, National Dairy Research Institute, Karnal.

19. Singh, Hubba Lal. **Economic analysis of indigenous dairy products in Western plain zone of Uttar Pradesh.** (Dr K K Kalra), Department of Dairy Economics, National Dairy Research Institute, Karnal.

20. Vellangany, Isaac. **Structure of energy demand in India: An interindustry approach.** Department of Economics, Maharaja Sayajirao University of Baroda, Vadodara.

Education

1. Akhtar, Parveen. **A study of popular and isolate high school students in relation to personality, intelligence, creative thinking abilities and socio-economic status.** (Dr N R Sharma), Department of Education, University of Jammu, Jammu.

2. Arora, Punam. **A study of equality of educational opportunity in Jammu & Kashmir State.** (Dr Meenakshi Chopra), Department of Education, University of Jammu, Jammu.

3. Dagar, Rajender Singh. **A comparative study of selected physical and physiological variables of football players on natural turf and beaten earth surface during different climatic conditions.** (Dr Shreedarshan Desai), Department of Education, Nagpur University, Nagpur.

4. Danikhel, Geeta. **Developing instructional material for improving reading skills amongst school students.** (Prof D N Sansanwal), Department of Education, Devi Ahilya Vishwavidyalaya, Indore.

5. Das, Jaishree. **Designing, developing and trying out of guidance services for students and community.** (Dr Archana Dubey), Department of Education, Devi Ahilya Vishwavidyalaya, Indore.

6. Karnadi, Eisha. **Factors responsible for total literacy: A case study of Ernakulam District.** Department of Education, Maharaja Sayajirao University of Baroda, Vadodara.

7. Khan, Fauzia. **Administration, management and staff development in central and state universities: A comparative study.** (Prof Mohd Miyan), Department of Education, Jamia Millia Islamia, New Delhi.

8. Nageswara Rao, S. **Performance of students of plus two stage in Visakhapatnam City on an industrial awareness test.** (Prof V Krishna Murty), Department of Education, Andhra University, Waltair.

9. Pandey, Vinita. **An investigation into the differentiation of reasoning abilities among school girls aged 13+, 15+ and 17+ years.** (Prof Devendra Joshi), Department of Education, Jamia Millia Islamia, New Delhi.

10. Patel, Laljibhai P. **Construction and standardization of scientific principle aptitude test, SPAT for the primary school children.** (Dr Mohanbhai K Patel), Department of Education, Gujarat Vidyapith, Ahmedabad.

11. Pundir, Sudhir Kumar. **Designing educational programmes for developing cooperation amongst learners.** (Dr B K Passi and Dr Prabhakar Singh), Department of Education, Devi Ahilya Vishwavidyalaya, Indore.

12. Satyavathi Murthy, G. **A study of educational values in Telugu novels.** (Prof T J Rajendra Prasad), Department of Education, Nagarjuna University, Nagarjunanagar.

13. Sunit Kumar. **A study of economic awareness in relation to cognitive and non-cognitive variables.** (Dr Aruna Suri), Department of Education, University of Jammu, Jammu.

14. Suvarna, Mary. **The effectiveness of training in study skills for high school under achievers in relation to their scholastic achievements.** (Dr H V Shivashankar), Department of Education, Kuvempu University, Shimoga.

Home Science

1. Andal, A. **Extent of participation in rehabilitation programmes by visually impaired women of Madurai and Trichy districts in Tamil Nadu.** (Dr S Sithalakshmi), Department of Home Science Extension Education, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.

2. Arora, Meena. **Case histories and coping styles of talented handicapped children.** Department of Home Science, Utkal University, Bhubaneswar.

3. Nanda, Ritika. **Status of women and children in Batnal community of Jammu.** (Dr Hira Shakti Singh), Department of Home Science, University of Jammu, Jammu.

Law

1. Satyanarayana, Y. **Constitutional dimensions of free speech and expression.** (Prof A Lakshminath), Department of Law, Andhra University, Waltair.

Library & Information Science

1. Dinesh Kumar. **Library software packages: Their availability, applicability and utility in S & T libraries.** Department of Library and Information Science, Kurukshetra University, Kurukshetra.

2. Narasimha Murthy, G. **A study of state policy and administration of libraries of collegiate education in Andhra Pradesh.** (Dr D B Eswarareddy), Department of Library and Information Science, Osmania University, Hyderabad.

Management

1. Baswaraja, Margam. **Comparative study of the working of housing financial agencies.** (Dr A V Satyanarayana Rao), Department of Management, Osmania University, Hyderabad.

2. Loganayaki, B. **Involving rural women in selected income generating activities.** (Dr R Rajalakshmi), Department of Family Resource Management, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.

Political Science

1. Arun Kumar, P. **Srikakulam revolutionary movement: An**

assessment, 1967-72. (Prof K Venkateswarlu), Department of Political Science, Andhra University, Waltair.

2. Bhoyar, Bhagawant Shioram. **Bhandara Jilhateel anusoochit jamatinchya rajkiyo kamacha abhyas: Gour, Rajgour, Halbi, Gourgovari, Pradhan, Binjhwar Kamwar, Mana, 1962-1990.** (Dr N B Khekale), Department of Political Science, Nagpur University, Nagpur.

3. Birendra Kumar. **Socio-political basis of the practice of untouchability: A case study of Katihar District.** (Dr P K Jha), Department of Political Science, B N Mandal University, Madhepura.

4. Chakravarty, Ajanta Ellora. **Administrative communicaion practices vis-a-vis communication needs of community in ICDS: A case study of Haryana.** (Prof Z M Khan), Department of Political Science, Jamia Millia Islamia, New Delhi.

5. Halluk, Abdullah. **A study of international river water disputes as a factor Syrias relation with its neighbours.** (Prof Z A Nizami), Department of Political Science, Jamia Millia Islamia, New Delhi.

6. Khanuja, Tajindra. **Swami Vivekanand ka rajnaitik chintan aur unke vicharon ka kriyanvayan: MP mein Indore va Raipur ke vishesh sandarbh mein.** (Dr L T Sakalle), Department of Political Science, Devi Ahilya Vishwavidyalaya, Indore.

Psychology

1. Mankad, Alka M. **Construction and standardization of thematic appreception test for adolescents of Saurashtra Region.** (Dr D J Bhatt), Department of Psychology, Saurashtra University, Rajkot.

Sociology

1. Choudhury, Anima. **Temples and shrines in and around Guwahati: A sociological and folkloristic exploration.** (Prof B N Dutta), Department of Sociology, Gauhati University, Guwahati.

2. Inamdar, Syed Mahaboob Miyan. **A sociological study of Muslims of rural Karnataka: A case study of Gulbarga District.** (Dr L S Ainapur), Department of Sociology, Gulbarga University, Gulbarga.

3. Kiprono, Eric Arapbor George Tonal. **Society, education and teachers in Kenya: A study in Sociology and Education.** Department of Sociology, Maharaja Sayajirao University of Baroda, Vadodara.

4. Mehta, Kalpana V. **Uchch ane madhyamvargani vyavsayee istriyon ane grahaniyoni bhumika ane harjjani drishti se tulanatmak abhyas.** (Dr Pragnaben B Jhaveri), Department of Sociology, Saurashtra University, Rajkot.

5. Mishra, Rajeev Kumar. **Baiga Janjati ka utthan: Janjati vikas karyakram ka prabhav.** (Dr P B Sengupta), Department of Sociology, Rani Durgavati Vishwavidyalaya, Jabalpur.

6. Satpathi, Nityanand. **Peace, development and environment: An eco-econo perspective.** (Dr Pravinbahi Seth), Department of Sociology, Gujarat Vidyapith, Ahmedabad.

7. Sen, Halkebhai. **Vikas karyakarmon ke sandarbh mein janjatiyon ka samajik, arthik parivartan evam bhavi disha: Chhindwara Jile ke Gond evam Bhariya janjati ka adhyayan.** (Prof Y G Joshi), Department of Sociology, Devi Ahilya Vishwavidyalaya, Indore.

Medical Teachers Wanted Immediately for NEPAL MEDICAL COLLEGE

Nepal Medical College is the first charitable health institution in Kathmandu established by Nepalese medical doctors, engineers, academics and management professionals and commenced first batch MBBS programme from December 1997. Two batches of 75 students are studying MBBS. Applications are invited from experienced medical teachers in (1) Human Anatomy (2) Clinical Physiology (3) Clinical Pharmacology (4) Pathology (5) Microbiology (6) Community Medicine (7) Clinical Biochemistry (8) Radiology (9) Anaesthesiology (10) Forensic Medicine. First phase 100 bed Nepal Medical College Teaching Hospital is being run by the college and it being planned for upgrading to 250 beds by November 1999.

Eligibility Criteria for Medical Teachers :

Basic requirements and broad principles for appointment of teachers with MBBS and MD/MS Medical qualifications to different levels are as follows :

1. **Professor :**

   (a) Should have postgraduate degree or equivalent qualification in the respective subject together with teaching/working experience of three years as Associate professor or equivalent post, and

   (b) Should have two original research and two original articles published in national/international journals as the main author at the level of Associate Professor.

2. **Associate Professor :**

   (a) Should have postgraduate degree or equivalent qualification in the respective subject together with teaching/working experience of four years as Assistant Professor or equivalent post, or seven years of teaching/working experience as Lecture or equivalent post and, (b) Should have minimum of two original research as main author and two other publications as main/co-author in national/international scientific journal at the level of Assistant Professor.

3. **Assistant Professor :**

   (a) Should have postgraduate degree or equivalent qualification in the respective subject together with teaching/working experience of three years as Lecturer or equivalent posts, and (b) Should have two original publications as the main author in national/international scientific journal.

4. **Lecturer :**

   Should have postgraduate degree or equivalent qualification in the respective subject.

Note :

(i) Those without MBBS and MD/MS qualifications may not apply.

(ii) Research and publications done in to acquire postgraduate qualification will not be taken into consideration as a substitute for publications required.

Monthly Salary :

For Lecturer : Indian Rupees Ten Thousand; for Assistant Professor : Indian Rupees Fourteen Thousand; for Associate Professor : Indian Rupees Eighteen Thousand and for Professor : Indian Rupees Twenty Two Thousand per month. (All figures after income tax deduction).

Facilities :

Free one bed room accommodation with sharing of other facilities with flatmates. Airfare with 20 Kg. extra luggage on joining, once return fare for the faculty only every academic year, three vacations (total 60 days) per academic year and "Dashain" Puja allowance after completion of six month service. Those eager to join immediately or within May 1999 may fax curriculum vitae by including their contact telephone or fax or email immediately. Forward formal application through proper channel enclosing photocopies of essential academic-testimonials, publications and recent passport photographs to the Executive Chairman, Nepal Medical College, P.B. No. 13344 Attarkhel, Jorpati VDC, Kathmandu, Fax No. 977-1-473118, Ph. No. 471875, 486009, email:nmc@mos.com.np Website:www.nepalonline.net/nmc

CLASSIFIED ADVERTISEMENTS

NAGPUR UNIVERSITY, NAGPUR

EMPLOYMENT NOTICE

ADVERTISEMENT NO. GA/1/99

Applications on prescribed form are invited for recruitment to the following posts of PROFESSORS and READERS in the Post Graduate Teaching Departments in the University. The application forms may be obtained from the Registrar, Nagpur University, Nagpur-440 001, and the application forms duly filled in by the applicant alongwith attested copies of certificates in support of qualifications, experience, age etc must reach the undersigned on or before 7th April 1999 by 5.00 p.m.

Sr. No.	*Name of the Post Graduate Teaching Department*	*Subject*	*Specialisation of the Post (if any)*	*Category of the post*
(1)	*(2)*	*(3)*	*(4)*	*(5)*
(A)	**PROFESSOR(S)**			
1.	DEPARTMENT OF ANCIENT INDIAN HISTORY, CULTURE & ARCHAEOLOGY	Ancient Indian History Culture & Archaeology	—	Open
2.	DEPARTMENT OF FINE ARTS	Fine Arts	—	Open
3.	DEPARTMENT OF HISTORY	History	—	Open
4.	DEPARTMENT OF LAW	Law	—	Open
5.	DEPARTMENT OF PHILOSOPHY	Philosophy	Modern Logic	Open
6.	DEPARTMENT OF PSYCHOLOGY	Psychology	—	Open
7.	DEPARTMENT OF PUBLIC ADMINISTRATION	Public Administration	—	Open
8.	DEPARTMENT OF STATISTICS	Statistics	—	Open
(B)	**READER(S)**			
1.	DEPARTMENT OF BUSINESS MANAGEMENT	Business Management	—	Open
2.	DEPARTMENT OF ELECTRONICS & COMPUTER SCIENCE	Computer Science	—	Open
3.	DEPARTMENT OF LIBRARY SCIENCE	Library Science	—	Open
4.	DEPARTMENT OF PALI & PRAKRIT	Pali & Prakrit	—	Open
5.	DEPARTMENT OF SANSKRIT	Sanskrit	—	Open

Eligibility Qualifications For the Post(s) Of Professor(s) At Serialnum (A).

An eminent scholar with published work of high quality, actively engaged in research with ten years experience in Post-Graduate Teaching and/or research of the University/National Level Institutions, including experience of guiding research at doctoral level in the subject concerned.

OR

An outstanding scholar with established reputation who has made significant contribution to knowledge.

PAY SCALE : Rs. 4500-150-5700-200-7300 (likely to be revised) plus other allowances admissible under the University/Government Rules.

Eligibility Qualifications For the Post(s) Of Reader(s) At Serialnum (B)

Good Academic Record with a doctoral degree or equivalent published work. Candidates from outside the University system, in addition shall also possess atleast 55% marks or an equivalent grade of the Masters degree level examination in the subject concerned.

AND

Eight years experience of teaching and/or research including upto 3 years for research degree in the subject concerned and has made some work in the area of scholarship as evidenced by quality of publications, contribution to educational renovation, design of new courses and curricula.

PAY SCALE : Rs. 3700-125-4950-150-5700 (likely to be revised) plus other allowances admissible under the University/Government Rules.

NOTES : 1. Nine copies of the prescribed application form together with the precis thereof, alongwith the requirement of Qualifications, Experience, Age, Pay Scales, Certificates required, for the concerned post(s), shall be supplied on payment of a non-refundable fee of Rs. 100/- (Rs. 50/- in respect of the applicants belonging to the Backward Classes, on submission of the certified copy of the Caste Certificate), payable by Crossed Indian Postal Order or a Demand Draft, drawn in the name of the Registrar, Nagpur University, Nagpur, alongwith a self addressed envelope (25 cms x 12 cms size).

2. Application(s) made on plain paper OR those in prescribed form received after the due date and time, shall not be entertained, under any circumstances, whatsoever.
3. Application(s) incomplete in any respect, shall be rejected without making any further reference.
4. Applicants who are in the employment, shall route their applications through their Employer. However, in case of an "Anticipated Delay", such applicants may submit the advance copies of their applications. In the event of applications duly forwarded by the Employer, not reaching the Registrar within the stipulated time, the applicant concerned shall be required to furnish a "No Objection Certificate" from his/her Employer, at the time of interview, in absence of which, he/she shall not be entitled to appear for the interview.
5. An applicant furnishing any incorrect or false information shall stand disqualified.
6. An applicant is required to submit a separate application for each post, in each category.
7. Envelope containing the application forms should bear a caption in capital letters as "APPLICATION FORM FOR THE POST OF ..... .
8. University shall not be accountable for delays of any sort, including the postal delay, if any.
9. Applicants shall not be entitled for any reimbursement in terms of TA/DA, towards attending the interview.
10. Canvassing, in any form, shall amount to disqualification.

Nagpur
Dated : 5/3/1999

REGISTRAR

SARDAR VALLABHBHAI REGIONAL COLLEGE OF ENGINEERING & TECHNOLOGY

SURAT-395 007 (GUJARAT)

The post of Professors/Asstt. Professors/ Lecturers in the following Deptts. and also Non-teaching posts of Dy. Registrar are vacant and the post of Registrar is likely to be vacant. The pay scale and necessary qualifications are as per A.I.C.T.E. Norms. The details regarding specialisation, age limit etc will be furnished alongwith application form, which can be had on payment of Rs. 50/- for open and Rs. 2/- for SC/ST/OBC of Gujarat State only (on production of Caste Certificate and the OBC candidates should submit Non-creamy layer certificate) in form of I.P.O. or D.D. drawn in favour of Principal, S.V.R. College of Engg. & Tech., Surat on State Bank of India, S.V.R. Branch, Surat Code No. 3320. Last date for issue of application form on 30.4.99.

A. **TEACHING**

Professors : Departments — (1) Computer (2) Chemistry

Asstt. Professors : Departments — (1) Chemical (2) Chemistry (Temp. but likely to be permanent) (3) Mech. Engg. (Temp.)

Lecturers : Departments — (1) Electrical Engg. (2) Mech. Engg. (3) Computer Engg. (4) Lect. in Maths

B. **NON-TEACHING**

(1) Registrar (2) Dy. Registrar (3) Foreman (W/S)

PRINCIPAL

TEZPUR UNIVERSITY

(A Central University established by an Act of Parliament)

Napaam : Tezpur : 784 025, Assam

Advt. No. F.13-1-/97 **Date : 09.03.99**

Applications are invited from eligible Indian citizens for filling up the following posts.

GROUP - A

1. Deputy Registrar — 2 posts, Rs. 12000-420-18300/-, Upper age limit : 40 yrs.
2. Deputy Finance Officer — 2 posts, Rs. 12000-420-18300/-, Upper age limit : 40 yrs.
3. Deputy Librarian — 1 post, Rs. 12000-420-18300/-, Upper age limit : 40 yrs.
4. Assistant Director (Centre for Disaster Management) — 1 post, Rs. 8000-275-13500/-, Upper age limit : 40 yrs.
5. Research Officer (Centre for Disaster Management) — 1 post, Rs. 8000-275-13500/-, Upper age limit : 40 yrs.
6. Information Scientist (Library Networking) — 1 post, Rs. 8000-275-13500/-, Upper age limit : 30 yrs.

GROUP - B

7. Computer Engineer — 1 post, Rs. 6500-200-10500/-, Upper age limit : 30 yrs.

GROUP - C

8. Data Entry Operator — 2 posts, Rs. 3050-75-3500-80-4590/-, Upper age limit : 30 yrs.
9. Junior Accountant — 1 post, Rs. 4000-100-6000/-, Upper age limit : 35 yrs.
10. Junior Office Assistant — 5 posts, Rs. 3050-75-3500-80-4590/-, Upper age limit : 30 yrs.
11. Electrician-cum-Linesman — 1 post, Rs. 3050-75-3500-80-4590/-, Upper age limit : 30 yrs.
12. Plumber — 1 post, Rs. 3050-75-3500-80-4590, Upper age limit : 30 yrs.

Prescribed application forms and other particulars about the posts can be obtained from the office of the undersigned either in person or on a written request accompanied by a self-addressed stamped (Rs. 5.00) envelope of 18 cm x 27 cm size on payment of Rs. 25.00 per set of forms-payable through Bank Draft drawn in favour of Registrar. Tezpur University on the State Bank of India, Tezpur or on cash payment at the cash counter of the university.

Application forms will be issued from 20.03.99 and completed applications will be received upto 30.04.99.

The Univerisity reserves the right to fill up or not to fill up any or all the posts advertised.

Reservation of posts :

GROUP	SC	ST	OBC
A	—	—	1
B	1	—	—
C	—	—	—

N.B. Upper age limit relaxable in case of SC/ ST/OBC candidates as per Central Govt Rules.

Dr. M.R. Sharma
REGISTRAR

MAR ATHANASIUS COLLEGE ASSOCIATION

KOTHAMANGALAM, KERALA-686 666

Applications are invited for the following post in the Mar Athanasius College of Engineering, Kothamangalam.

Lecturer in Physical Education (anticipated) : 1 No.

Qualification, scale of pay and age will be as per norms prescribed by the AICTE, Mahatma Gandhi University and Kerala Government.

Application forms and other details can be had from the Principal, Mar Athanasius College of Engineering, Kothamangalam-686 666, Kerala on payment of Rs. 100/- in person or by DD drawn in the name of the Secretary, M.A. College Association, Kothamangalam with a self-addressed envelope 23 x 10 cm affixing postal stamps worth Rs. 16/-. Filled up applications should reach the Secretary, Mar Athanasius College Association, Kothamangalam within 30 days of the date of the publication of the advertisement.

Kothamangalam
09-03-1999 **SECRETARY.**

NORTH GUJARAT UNIVERSITY

PATAN-384 265 (N.G.)

Adv. No. 43/1999

Applications are invited in the prescribed form (in seven copies) for the following posts of this University alongwith details available from cash counter on payment of Rs. 50/- in cash or by crossed I.P.O. in favour of Registrar, North Gujarat University, Patan (N.G.), so as to reach the undersigned **on or before 9.4.1999.**

Reader : Sanskrit — 2 posts,
Mathematics 1 post

Lecturer : Management — 1 post,
Prakrit — 1 post

(Two posts reserved : one each for S.T. & S.E.B.C. candidate)

Conditions :

1. Knowledge of Gujarati is essential.
2. Number of posts may vary. If candidates for reserved category are not available for the post of lecturer in Management, and Prakrit, other candidates may be considered for the recruitment.

Note : Knowledge of Sanskrit preferred for lecturer in Prakrit.

Date 10.3.1999 **Bharat Shah**
Place : PATAN **REGISTRAR**

BANASTHALI VIDYAPITH

(Deemed to be Unviersity)

Women's Institute for Studies in Development Oriented Management (WISDOM)

FACULTY POSITIONS

Applications are invited for the posts of **Professors/Readers/Lecturers** in areas of Marketing, Finance and HRD. Qualifications as laid down by UGC/AICTE.

Pay Scales (Revised) : Professor 16400-22400, Reader 12000-18300 and Lecturer 8000-13500. D.A., CPF, Family Pension and Insurance as per Vidyapith rules. Wearing of Khadi compulsory on appointment.

Bio-data may be sent within two weeks of this advertisement to Secretary, Banasthali Vidyapith, P.O. BANASTHALI VIDYAPITH-304 022 (RAJ.) Fax (01438) 28365. Advt. No. 3/99.

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INSTITUTE FOR DEVELOPMENT AND RESEARCH IN BANKING TECHNOLOGY, HYDERABAD

(Established by Reserve Bank of India)

FACULTY POSITIONS & RESEARCH FELLOWS (Ph.D. Program)

The Institute for Development and Research in Banking Technology located at Hyderabad has been established by Reserve Bank of India with the objective to undertake the highest quality of Research, Development, Training and Consultancy in Banking Technology.

IDRBT is in the process of installing VSAT based Closed user Group network of Banking and Financial Sector, which will be operationalised in the first quarter of 1999.

The Institute is working on a number of research projects in the area of Electronic Payment systems, Security, Standards, Certification, Data Ware-housing, Multi-media products etc, IDRBT is collaborating with the University of Hyderabad to conduct Doctoral Programme and jointly conduct research and advanced education and training programmes in the area of Banking Technology and also allow MCA/M.Tech. projects to be carried out at the Institute in the area of banking technology.

The Institute has completed Academic complex with excellent facilities of Library, Conference Hall, Lecture-Hall, Computer and Multi-media labs, Campus-wide network, Computer resources, etc, and Executive Facility Centre which has executive rooms, visiting faculty accommodation, Research Fellow rooms, VIP Suites, executive lounge and a full-fledged recreation/ relaxation centre with all modern facilities.

FACULTY POSITIONS

IDRBT invites application for posts of Faculty, Visiting Faculty and Faculty on deputation to guide and undertake the development, research and training activities. **Qualification and experience**, Ph.D. in Computer Science or closely related area with a very good academic record and relevant experience. Outstanding candidates with Post Graduation in Computer Science and relevant experience will also be considered. The Institute will also consider Professional Bankers with relevant experience and qualification for deputation to the Institute.

Remuneration : The salary scales of the faculty member are equivalent to those in IITs/IIMs. In addition, the Institute provides liberal perquisites such as medical facilities, vehicle loan, housing loan, leased accommodation, conveyance allowance etc., and other regular benefits. Faculty members are also entitled to accept CONSULTANCY ASSIGNMENT as per the rules of the Institute. Visiting Faculty will be provided furnished accommodation (less than a year) and an attractive pay package.

Applications giving full particulars about age, qualifications, details of experience, etc., must be sent within one month to the address given below.

RESEARCH FELLOWS/DOCTORAL PROGRAMME

The University of Hyderabad has recognised the Institute as a centre for guiding Ph.D. students under the external category. The Institute proposes to select up to five Research Fellows in collaboration with University of Hyderabad. Research fellows will work in the area of Banking Technology at the Institute. IDRBT will be awarding Rs. 8,000/9,000/10,000/- fellowship per month to selected candidates in the first/second/third year. Research Fellows will be involved in the research activities related with banking technology at the Institute. They will also get simultaneously registered for Ph.D. program at the University of Hyderabad. The Institute will provide single room accommodation facilities to the Research fellows on a chargeable basis. Minimum qualification for research fellows — Post Graduate degree in Computer Science or closely related area with minimum 55% marks or first class B.Tech/B.E. in Computer Science or Computer Engineering. Candidates appearing in final examination in 1998-99 can also apply.

Applications giving full particulars about age, qualifications, experience etc, and superscribing on the envelope "Research Fellowship" may be sent to the address given below. Shortlisted candidates will be supplied University of Hyderabad's prospectus and application form for consideration for the Ph.D. programme.

Address for communication :

The Director,
INSTITUTE FOR DEVELOPMENT AND RESEARCH IN BANKING TECHNOLOGY,
IDRBT, Castle Hills, Road No. 1, Masab Tank, Hyderabad-500 057 India
Fax : 3535157, E-mail:vpgulati@idrbt.ernet.in

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